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ABSTRACT

Relatively new year-round calendars are examined in this book. Chapters deal with the rationale for year-round operation; status, trends, and problems of year-long campus calendars; financial implications of year-round operation; and case studies of selected year-round programs in operation. Fifty-four specific institutions are identified. Educational, administrative, and socioeconomic reasons for offering at least 40 weeks of classes per calendar year are reviewed. The current situation is summarized with the outlook for the future evaluated. Appended is a 21-item annotated bibliography. (LBH)

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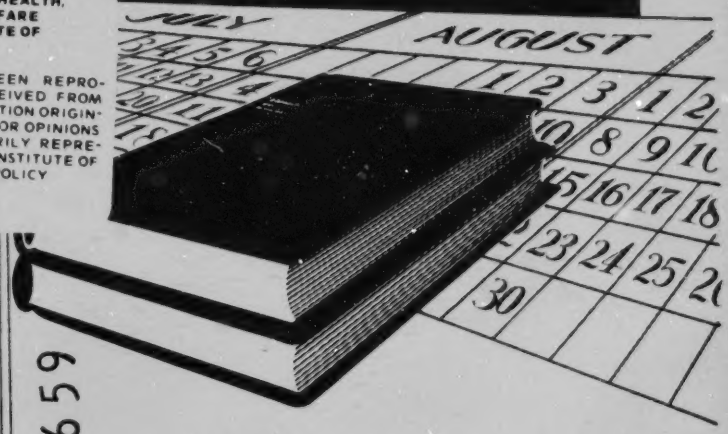

by
W. HUGH STICKLER
and
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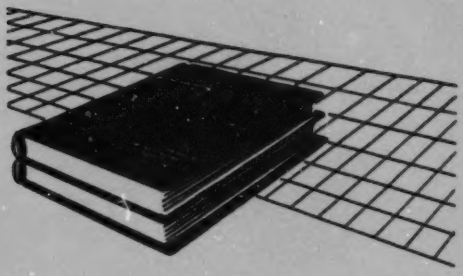

The Year-Round Calendar in Operation

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1963

SOUTHERN REGIONAL EDUCATION BOARD
130 SIXTH STREET, N. W.
ATLANTA 13, GEORGIA

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Foreword

Rising costs and dramatic enrollment increases have stimulated great interest in the year-round use of campus facilities and programs.

A 1960 survey of summer sessions by the U. S. Office of Education identified six academic purposes for which institutions already offer programs during the summer months: acceleration; rehabilitation (make-up work); demonstration of new program ideas; summer workshops, seminars, institutes, etc.; enrichment; and expansion.

Expansion—the last of these purposes—suggests in the most complete sense the concept of what is called the "year-round" calendar. The Commission on Goals for Higher Education in the South, which recommended year-round operation of colleges and universities, explained its use of the term in these words:

> Year-round operation is not the same as a summer school program. It means the addition of a full fourth quarter or third semester to the school year. It means that courses are offered during the summer months on the same basis as the rest of the year.

The Southern Regional Education Board has followed with keen interest the efforts colleges and universities have made

toward greater activity during the summer months. In view of the wide range of opinion regarding the need for college calendar revision, SREB will continue to promote studies to shed light on the success of the various procedures which are being tried.

This publication is a provocative review of year-round calendar practices throughout the country as of 1965. Dr. Stickler and Dr. Carothers have expressed clearly their own views on the subject. Without necessarily subscribing to the opinions here formulated, the Board invites individuals who are interested in promoting the best ends of higher education to join the authors in "looking at what is going on across the nation" in the area of calendar revision. More than any other current source on the subject, this analysis reflects a serious search for answers by authors who are themselves involved in their own institution's calendar revision.

Winfred L. Godwin
Director
Southern Regional Education Board

Preface

At no time in the history of higher education in the United States has there been greater interest in the academic calendar than at present. Today this interest goes far beyond the relative merits of the semester system and the quarter system. Rather, it centers on the year-round calendar.

For more than a decade educators have known that a tremendous enrollment increase will hit our colleges and universities in the middle sixties. Now the time is at hand. In institutions of higher learning all across the land a question of major concern is this: how can we provide quality higher education for these vast numbers of qualified American youth?

There is no one solution to this problem: many things will have to be done. But one partial solution undoubtedly lies in using college and university campuses on a year-round basis.

So widespread is interest in year-round campus operations that the Southern Regional Education Board asked the authors to take a thorough look at what is going on across the nation. This they have done. More than 50 institutions known to be operating on year-round calendars were identified.[1] These institutions are listed in the appendix. By means of correspondence, questionnaires, telegrams, telephone calls or various combinations of these media, the writers have been in contact with all of

the institutions which constitute the basic population for this study. A third of the campuses were visited by one or both of the authors in order that the programs of year-round operation in these institutions might be seen first hand.

This report is being prepared in mid-1963. It must be remembered that many of the plans for year-round calendars are relatively new. Many have been in operation only a year or two; others will not be launched until the fall of 1963 or the fall of 1964 or even later. Dozens of institutions are only now getting their programs to the blueprint stage; scores of others are just beginning to think about the problem. Because experience with the new calendars to date is limited, it is too early to make a careful analysis of year-round campus operations or to draw definitive conclusions concerning their effectiveness. Three to five years hence—after institutions have had more experience with their new patterns of year-round schedules—a more thoroughgoing study will be in order. This futher study the writers hope to make at a later date.

Even though experience with year-round calendars is limited, interest in the subject is great. So the authors offer this publication as something in the nature of a progress report. The changing and evolving nature of the subject is reflected in the title—*The Year-Round Calendar in Operation: Status, Trends, and Problems.*

W. Hugh Stickler
Milton W. Carothers

Tallahassee, Florida
June, 1963

Acknowledgments

Many persons assisted with various aspects of this study. James L. Miller, Jr. and E. F. Schietinger of the SREB staff were most helpful and to them the authors extend a special word of thanks.

At least one person in each participating institution helped by completing a rather time-consuming questionnaire. On each of the campuses visited by the authors from one to six persons gave hours of time in professional conversation. A dozen persons participated in the preparation of the written case studies which appear in Chapter 4. Indebtedness to all these people is gratefully acknowledged.

The authors wish to recognize with thanks Aubrey K. Lucas, graduate assistant in the Department of Higher Education at the Florida State University, for assistance in data collection and analysis.

Finally, the writers express thanks to Mrs. Jeanne Z. Bevis, our secretary, for many hours of work associated with the project. We are especially grateful to her for assistance in the preparation of the final typescript.

W. Hugh Stickler
Milton W. Carothers

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Chapter 1

Why Year-round Operation?

Within the next 20 years, every college and university in the United States will either be on a year-round schedule or will make such acceleration of the college years possible for those students who want it.

Whether or not President Grayson Kirk of Columbia University is right in making the above prediction remains to be seen; in making it, however, he reflects the extensive interest in year-round academic calendars which is evident today in higher education circles. Reasons offered for lengthening the school year may be divided into two major categories: educational and administrative.

EDUCATIONAL CONSIDERATIONS

Among the educational reasons for moving into year-round campus operation are the following:

1. Knowledge is expanding at an explosive rate; colleges and universities need more time to deal with it effectively.

2. Because of the explosion of knowledge, curricula—especially graduate and professional curricula—are getting longer and longer; if the year-round calendar will shorten this overall

educational process and get the graduate into his life work earlier, it should be given serious consideration.

3. General-liberal education alone or specialized-graduate-professional education alone is no longer enough; to live effectively in today's world one must have both, and that takes time. Yet Litchfield contends that under a year-round academic calendar "both a liberal and a professional education often can be acquired within the time span formerly devoted to one or the other."[7]

4. Year-round campus operation evokes greater seriousness of purpose on the part of the student. It advances the view that time is a precious human resource. It provides a better opportunity for the student to move through his educational program at an accelerated speed if he wishes to do so.

Chancellor Litchfield of the University of Pittsburgh summarizes as follows the educational reasons for introducing the year-round calendar in that institution:

> We believe that such a calendar makes possible a more complete education, provides a more flexible means of coping with the expansion of knowledge, and encourages the entry of people into professional life at an earlier and more productive age.[8]

ADMINISTRATIVE CONSIDERATIONS

Representatives of the institutions included in this study agree in general that there are good and logical educational reasons for going to year-round operation. In the main, however, these representatives see the administrative reasons for the full-year calendar as far more compelling.

Administrative advantages of year-round operation emerge from the following lines of reasoning:

1. The long talked-about "tidal wave of students" is now beginning to move in; soon it will be at flood stage. In several states—Florida and California, for example—the number of college students will more than double between now and 1970. In Florida the number will more than triple by 1975.[9] The year-round calendar provides a better vehicle for dealing with these vast numbers of students.

2. College and university physical plants are already being heavily used. Dormitories are filled; classrooms, laboratories,

and libraries are more crowded than ever before. Year-round operation enables an institution of higher education to increase substantially the utilization of both its academic and its non-academic space.

3. There is already a shortage of well-qualified faculty members, and the situation regarding demand and supply of college and university teachers is almost sure to get worse before it gets better. Nobody claims that college faculty members can teach "around the calendar" year after year, but there is reason to believe that the year-round schedule is one way of making already-limited faculty resources go further. Over a period of years it will undoubtedly enable the well-qualified faculty member to come in contact with more students than would otherwise be possible.

4. Not only will year-round operation enable the college to serve more students, the services can be provided at lower cost per student. With careful management substantial savings will be possible. Longer student-room rentals per year will amortize dormitory indebtedness faster. Better utilization of facilities over a greater number of weeks per year will substantially reduce over a period of years the amount of capital outlay required to operate the institution. Although it is difficult at this stage of full-schedule development to quantify the economic advantages of the year-round calendar, there is reason to believe that these advantages are considerable. The financial implications of year-round operation will be discussed at length in Chapter 3.

Litchfield summarizes the administrative reasons for moving to year-round operation in these words:

> In general we can say that if we are to meet the needs of the coming generation of students, we must make our resources go further by more intensive use. Failure to do so means either a poorer quality of education for a large number of students or refusal on our part to educate many young people who are qualified for an education. In our view neither alternative is likely to help our nation . . .[3]

OTHER CONSIDERATIONS

At least two other points figure in the rationale for a year-round academic calendar. First, our nation today confronts

world-wide responsibilities greater than were ever faced before. Busy minds, greater respect for time, and deep concern for the full use of human abilities and resources—all concomitants for year-round campus operations—will put America in a better position successfully to discharge those responsibilities.

Finally, year-round operation brings educational institutions into line with the pace of the times. The unhurried academic life of yesteryear grew out of an agrarian society. This leisurely pace interspersed with long vacations can no longer be justified. The times demand a quickening of pace in our colleges and universities to bring them into step with the pace of our national life. Year-round campus operation is one way of meeting this demand.

Chapter 2

The Year-round Campus Calendar: Status, Trends, Problems

WHAT CONSTITUTES YEAR-ROUND OPERATION?

It is generally agreed that in order for a college or university to be on a year-round calendar it must be in session at least 40 weeks per year. The current study shows the actual range of year-round operations to vary from 40 to 48 weeks per calendar year. But beyond this general agreement regarding the time requirement, confusion exists as to what constitutes a year-round calendar. Tickton implies that a college or university has achieved year-round operation when its program permits

> . . . the student who desires to do so to earn his B.A degree in three rather than the usual four calendar years (or to earn a B.A. in a work-study program, or a master's degree in a shorter period of time than would otherwise be possible) without requiring him to carry more than a "normal" full-time course load.[5]

The present writers accept this as a minimal definition but in so doing point out that according to this view a large number of institutions are already on year-round operation and that

some of them have been operating on such calendars for several decades.

More recent views concerning year-round operation go beyound this definition, contending that it is not enough merely to provide the arrangements and program that make possible the completion of a baccalaureate degree program in three years; rather a true year-round operation must include an agressive effort to stimulate enrollments in periods of the year in which heretofore the faciilities of the institution have not been utilized for academic purposes to substantial capacity.

These more recent views may be summarized in the following definition: a year-round campus operation is one which (1) permits a student to enter the institution at the beginning of any term, to pursue a normal program of studies in the usual sequence without encountering undue scheduling difficulties, and, if he wishes to do so, to earn his baccalaureate degree in three calendar years without requiring him to carry more than a normal course load; (2) encourages and stimulates summer enrollment by both new and former students; and (3) follows practices and policies which are calculated to move the institution rapidly in the direction of approximate equalization of enrollment in all periods.

Although complete interchangeability of terms is not in all cases a *sine qua non* for a full-schedule calendar, it is highly desirable; the optimum or ideal year-round operation is characterized by terms of equal length, equal character, equal status, approximately equal admissions, approximately equal enrollments,* and equal pay-per-term for members of the faculty and staff. It should be noted that these characteristics set forth the conditions for optimum year-round operation. This does not mean that each condition must be met in full in order to make a full-schedule calendar feasible. It does mean that the efficiency of year-round operation will be enhanced to the degree that these optimum or ideal conditions are met.

This study involves institutions representing the entire spectrum of colleges and universities included in the above definitions. The authors think it fair to indicate, however, that they believe the newer type programs will emerge and prevail as the basic models for future year-round campus operations.

STATUS OF THE YEAR-ROUND CALENDAR

How goes the year-round calendar? What are the principal patterns? Are these programs prospering, holding their own, or faltering?

In part, the answers to these questions depend on the choice of definitions noted earlier. If the minimal definition is accepted, then year-round calendars are common and have been in operation for a long time. Four-quarter and two-semester-plus-summer-session systems have been used for decades. But efforts at more intensified and balanced year-round operations are fairly recent.

Variations in academic calendars are legion. In the main, however, year-round calendars are of four basic types:

1. **Two-semester-plus-summer-session calendar.** About six out of seven American institutions of higher education operate on the semester system. Large numbers of these institutions, especially the public ones, also add summer sessions varying in total length from 6 to 12 weeks. Altogether the institution may be in session 40 to 48 weeks within a calendar year. This type of calendar falls within the minimal definition set forth earlier and merits inclusion in this study. It should be noted, however, that in this calendar the summer sessions are generally "different." They are shorter than the other terms; the academic pace is irregular; the curriculum is usually curtailed; and many of the regular faculty members are off campus. Summer enrollment is frequently only a fourth to a half of the regular fall enrollment and the offerings cater largely to "mature" students, public school teachers, and graduate students. It most cases the summer session does not mesh with the regular program; it is a sort of academic appendage. So while the two-semester-plus-summer-session calendar meets the minimum definition of year-round operation, it does not meet or even approach the optimum conditions for operating a year-round academic calendar mentioned earlier in this chapter.

2. **Four-quarter calendar.** The second most commonly used calendar is the quarter calendar. Typically, this system provides for three regular quarters per year plus a fourth quarter which constitutes the summer session. But the summer quarter shares many of the weaknesses of the summer session in the two-semester-plus-summer-session calendar: it is "different." If this

summer quarter were revamped, however, if it were made an integral part of the regular academic program, and if it were to cater to the regular undegraduate student clientele, it might very well serve the purpose of rounding out a full-blown year-round calendar. Few institutions currently operating on the four-quarter calendar yet meet the optimum conditions for year-round operation. Some, however, are moving toward that goal. The potential of full-blown year-round operation under the four-quarter calendar is clearly present.

3. **Four-term calendar.** This comparatively new calendar is similar to the four-quarter year-round calendar except for one basic difference: academic credit is granted in semester hours rather than in quarter hours. Under this calendar classes typically meet 75 minutes per period for 10 weeks rather than 50 minutes per period for 15 weeks as is the case under the semester system. Active effort is made to upgrade the status and character of the summer terms and to increase enrollments sharply in the summer sessions. The Pennsylvania State University and Shippensburg (Pennsylvania) State College are examples of institutions operating under this type of calendar.*

4. **Three-trimester calendar.** The trimester calendar is another fairly recent arrival on the academic scene. Although of doubtful etymological authenticity, the word "trimester" seems to convey the intended meaning; apparently the word is here to stay. Under the trimester plan, which basically is a modification of the semester plan, the year-round academic calendar is composed of three 15-16 week terms, all of equal or near-equal length. The summer trimester is an integral part of the total academic calendar. Among the major institutions now using the trimester calendar are the University of Pittsburgh and all of the state universities of Florida.

How many colleges and universities currently operate on year-round calendars? This is a common and fair question but it is not an easy one to answer. If the minimal definition (*i.e.*, 40 or more weeks of classes per calendar year and provision for a student to complete the bachelor's degree in three years) is accepted, the number of institutions on year-round operation is large and their cumulative experience is long. Literally, hundreds of colleges and universities operate on the two-semester-

* In the discussion which follows the four-term calendar is considered to be a four-quarter calendar.

plus-summer-session system, while several scores of institutions use the four-quarter system. Only a handful of institutions at present, however, use the four-term system which awards credit in semester hours. Fewer than three dozen colleges and universities have the trimester calendar in actual operation. It is not surprising that the number of institutions operating on the four-term-with-semester-credits-system and on the trimester system is still relatively small; in general these calendars are relatively new phenomena on the American academic scene.

Whatever the number of full-schedule calendars may be, the subject of year-round campus operation is very much alive and in a state of ferment, and the number of year-round institutions is steadily increasing. Several institutions which have not yet gone to year-round operation have made their basic decisions for later implementation. Many other institutions—scores if not hundreds—are exploring the possibility and feasibility of year-round campus calendars.

TRENDS IN YEAR-ROUND OPERATION

Although the newer concerns for year-round operation are only now beginning to take substantial form, certain trends seem already to be emerging.

The chief trend is toward more intensified, better balanced, and more unified year-round programs. Although few if any institutions yet meet in full the criteria of optimum conditions (*i.e.*, terms of equal length, equal character, equal status, approximately equal admissions, approximately equal enrollments, and equal pay-per-term), more and more colleges and universities are moving toward these goals.

The most far-reaching changes are being made in the summer terms. Aggressive efforts are being made to upgrade the summer sessions and to equate them with the other terms of the traditional academic year. The end goal is to make the summer term interchangeable with any other term. The hope is to create a single, integrated, unified year-round program, a sort of seamless garment in which the various terms are incidental divisions for convenience.

Many inducements are being used to increase summer enrollments. Among the inducements revealed by this study are the following: entrance into the program at the beginning of

any term (including summer); acceleration of the academic program and graduation with the baccalaureate degree in three years or less; pre-registration for the whole year; slightly lower admission requirements for the summer term; remedial work in the summer term only; required summer attendance for students on probation; an outstanding fine arts program in the summer only—including well-known guest artists, a symphony orchestra, and Broadway and Hollywood stars of stage, screen, and television; a summer program in "rapid reading"; split summer semesters; reduced tuition for the summer term; lower room rentals in dormitories during the summer sessions; foreign travel and study; better summer curricular offerings; staggered or assigned admissions for students who meet the usual requirements but who cannot be admitted in the fall; college housing priorities; and air-conditioned academic space and living quarters. As institutions get more experience with year-round operations, still other inducements will undoubtedly be invented to lure more students, especially more undergraduates, into attending college during the summer months.

Although, in general, instructional methods seem to be basically unchanged under the year-round calendar, certain trends seem to be emerging with regard to instruction-related practices. There is a generally quickened academic pace: this is reflected by longer class periods over fewer weeks per term. Final examination periods are being telescoped and sometimes are eliminated completely with the final tests being given during the last meeting(s) of the class. In general, registration periods are shorter and pre-registration is increasingly common under full-schedule calendars.

Extracurricular activities are probably receiving less student patronage in those institutions operating under intensified year-round calendars. In some cases the institutions have somewhat curtailed extracurricular offerings. More frequently the full complement of extracurricular activities is offered but relatively fewer students participate. Students frequently state they are simply too busy with academic matters to participate in extracurricular affairs.

Although as yet it can scarcely be called a trend, there is some evidence of increasing acceptance of the principle of equal pay for equal periods of faculty time. A number of institutions

already have adopted this principle and have it in operation. The number seems to be growing. The present writers consider acceptance and implementation of the principle of equal pay for equal work to be an absolute necessity for the long-term success of any program of year-round operation.

It is too early to be sure about the matter, but the emerging trend in year-round operation seems to be toward the trimester calendar. Data from this study seem to justify this tentative conclusion. Easton of Rutgers University, by analyzing ideal mathematical models for year-round operation, shows that in terms of faculty use, use of facilities, student capacity, and cost the trimester calendar is the most efficient system yet devised.[10] Nelson Associates in their report to the State University of New York note:

> The superior efficiency of the balanced trimester as compared to the balanced quarter plan can be traced essentially to the fact that one and one-half academic years can be accommodated in one calendar year under the trimester plan while only one and one-third academic years can be accommodated in one calendar year under the quarter plan.[11]

Hungate and McGrath strongly recommend a trimester three-year degree program.[12]

Grayson Kirk, who was quoted at the beginning of this publication as saying "within the next 20 years, every college and university in the United States will . . . be on a year-round schedule . . .," is quoted later in the same news story as saying that ultimately the ". . . 2,000 colleges and universities in the country 'will come to the trimester plan'—three academic periods year-round instead of two semesters for eight months.'"[13]

There are at least two compelling reasons for believing that the trimester calendar will emerge as the modal plan for year-round campus operation. First, as has just been noted, Easton and Nelson Associates present evidence to show that it is the most efficient system. Second, since the trimester plan is actually a variation of the regular semester calendar, it is a relatively simple matter to shift from a semester to a trimester operation. Nearly 85 per cent of America's colleges and universities currently use the semester calendar; this

fact will undoubtedly prove important as institutions move toward new-type year-round operation.

Actually, the particular type of plan is not of major importance and it is not likely that any one plan will emerge—at least in the foreseeable future. If the optimum conditions can be met—terms of equal length, equal character, equal status, approximately equal admissions, approximately equal enrollments, and equal pay for equal work for faculty—any one of several types of year-round calendar is likely to operate successfully.

PROBLEMS ASSOCIATED WITH YEAR-ROUND OPERATION

Year-round operation solves some problems; it creates others. In this section are considered a number of problems related to the full-schedule calendar.

Educational Problems

Some of these problems are educational in character. For example, as yet the educational effects of longer-period-shorter-term operations of extended duration have not been adequately appraised. Will compression of the same amount of work into a shorter span of time constitute an "overload" and result in poorer quality of work? Nor has the effect of intensive and continuous year-round operation on the long-range quality of higher education been adequately determined. Is the hurried atmosphere of the year-round calendar conducive to superior scholarship? Will lowering the average age of completion of each degree result in less maturity and adversely influence the quality of academic work? And what about the total research effort of the college or university? Whether it is enhanced, unaffected, or diminished by year-round operation is not yet fully known. These problems do not seem to indicate inherent characteristics of year-round operation which would reduce educational quality; in fact, preliminary and incomplete evidence seems to show no deleterious effects upon the total educational effort of an institution. But more—much more—evidence is needed: these problems should be studied intensively and head on.

Administrative Problems

Also, there are administrative problems. Undoubtedly the most difficult of these administrative problems is that of get-

ting faculty members to teach and students, especially undergraduate students, to go to school in the summer time. Traditional patterns of college attendance are deeply ingrained in faculty, students, parents, and the various academic publics—all resist change. Eric Walker, the president of Pennsylvania State University, refers to this custom of going to school during the winter months but not during the summer months as "an American folkway." Yet, unless the summer term is attended in stride by quantities of regular students, there is no real year-round operation regardless of the name given to the calendar. Relief for this problem may be in sight. Pressures for admission within the next few years will undoubtedly force many students to go to college whenever they can, including the summer session. But for the next few years—until the flood tide of students engulfs our campuses and makes summer attendance virtually obligatory—the problem of recruitment for the summer session will continue to be real and difficult.

Under a year-round calendar there is, as has been indicated, a general speed-up of institutional operations. Things move at a faster pace. The admissions office works longer and harder; another registration period is necessary; more grades must be distributed; possibly another commencement exercise will be arranged. Business operations are intensified and more extensive; student personnel workers have more to do; housing and feeding services have more customers and a longer work year. The problem of maintaining the physical plant is made more difficult when there is less time with students off campus. Classroom and dormitory painting, building renovation, street alterations, and the like are not as easy to schedule and carry out. These problems attendant to the general speed-up of year-round operation are by no means insurmountable but they must be taken into account.

Then, too, there are financial problems with which the administration must necessarily be concerned. Sufficient funds must be obtained for equitable term-to-term year-round operation. Money may come from more students paying more tuition and fees, from additional legislative appropriations in the case of public institutions, from other sources, or from various combinations of these sources, but it must be forthcoming. The financial implications of year-round operation will be discussed at length in Chapter 3.

Problems Associated with the Faculty

Special problems may be encountered with regard to the faculty. In some cases there will be recruitment problems. Some potential faculty members simply will not like the year-round calendar and will not be attracted to it—at least until it becomes far more common than at present. Others will not like the salary provisions of the full-schedule plan, especially if it involves a system of pay other than that of equal pay for equal work.

Under the traditional academic calendars different faculty members have used the summer months in different ways. Some have taught in summer sessions in other institutions; year-round operation may preclude this practice or at least make it more difficult in the future. Young faculty members not yet holding the doctorate frequently continue graduate study during the summer months; this may not be so easy to plan under the year-round calendar. Many professors use the summer for intensive and sustained research; year-round operation may in some cases necessitate teaching instead. For college teachers summer time has traditionally been travel and vacation time; in some cases this may have to be changed. And in the long haul year-round operation may produce very real problems with regard to family vacations, especially in families having school-age children.

Educators, even under the familiar calendars, have never been able to agree as to what constitutes an adequate and appropriate workload for a faculty member. Under year-round operation the problem of faculty workload is intensified. How much should a typical faculty member teach per term? How much faculty research should be expected? What about other faculty responsibilities—committee work, service activities, consulting, and the like? What should be the length of the work year for the faculty—three quarters out of four, two trimesters out of three, individually-negotiated leave, or no limitations at all on employment and workload per calendar year?* And is sabbatical or other regular leave even more important under year-round operation than it is under the traditional calendars?

* In connection with this study one of the authors visited an institution which has no limitation on continuous work and/or year-round employment for faculty members. A professor-friend seemed to be speaking for many of his colleagues when he said, "We are rapidly becoming a tired faculty. But the pay is good!" May it be that faculty members—at least in some cases—will have to be protected from themselves in this matter of faculty workload and faculty pay?

It is entirely possible—and highly desirable—for a year-round operation to be successfully installed without requiring year-round teaching on the part of individual faculty members. The institution, not the individual college teacher, operates on a year-round basis.

Also, it is to be noted again that adequate and equitable pay for faculty members constitutes a problem. In this connection current practices vary widely. Some institutions have established the principle of equal pay for equal periods of service, but most institutions pay less for the summer session than for the other terms even though all terms are of the same length. Faculty members have difficulty in reconciling such discrepancies. Problems such as these ought to be resolved on a fair and equitable basis; the writers believe that the solution lies in acceptance of the principle of equal pay for equal work.

Problems Associated with Students

Students also have their problems with regard to year-round operation. First, there is the problem of articulating transfers between high school and college, between junior college and senior institution, and between one senior institution and another. When different institutions have different calendars, the starting dates may not articulate and time lapses may ensue. This becomes a particularly important problem when an institution is trying to equalize admissions and enrollments from term to term. A partial solution may be found in making provisions for "trailer" groups. At least two institutions operating on the trimester calendar employ the "trailer" principle. The winter trimester begins in early January but in order to pick up mid-year high school graduates these colleges start "trailer" sections in February (carrying an accelerated and reduced load for a shorter period of time). In like fashion the spring or summer trimester begins in late April but in order to pick up the May-June crop of high school graduates additional "trailer" sections are started in June. By the next trimester in each case the "trailer" student is placed in a regular schedule.

Mentioned earlier is the problem of getting students to go to school in the summer. How can the school-going habits of students be changed? The lure of acceleration has been and is being used, but so far this inducement does not affect large

numbers—at least a large proportion—of college students. When the pressure for admission reaches flood-tide proportions—as it will within the next very few years—the problem of summer attendance may be solved for students; they will go to school when they can. Until then the summer attendance, especially for undergraduates, is and probably will remain a problem.

There is also the problem of length of school year for individual students. Should college attendance be continuous or intermittent? In this connection different institutions encourage different practices among students. For example, three liberal arts colleges included in this study make year-round attendance highly attractive—almost mandatory. They make it clear to entering students that one program is involved, that it should be considered as a whole, and that continuous attendance is highly desirable and ordinarily expected. The total program may include work terms, terms for travel abroad, terms for independent study and research, and the like—but it is one program and the student ordinarily should not enter it unless he expects to go straight through. In other institutions accelerated attendance is encouraged but not required. In still others—and especially in public institutions—attendance is optional on the part of the student but it is hoped that attendance will be staggered so that the various terms will be characterized by approximately equal admissions and approximately equal enrollments. Surely, acceleration by the student is not a necessity to successful year-round operation; the central feature is balance by means of equal term enrollments, whether the student be accelerating or attending on a "normal" but staggered schedule. A year-round calendar should permit a student to accelerate but except in special cases like those of the liberal arts colleges noted above he should not be required to do so.

As pressures for admission increase, a new dimension may be added to this problem. In the foreseeable future it is entirely possible that some institutions—especially public institutions in rapidly growing states—will find it necessary to schedule college attendance in advance on an assigned and staggered basis. In such a case the institution may consider the wishes of the student, but the option for the final assignment will likely rest with the institution. This procedure may be nearer at hand than most people would think.

There may be a problem in some cases regarding student course-load. As noted earlier, the academic pace in year-round operation is fast. Perhaps most students will be able to handle a "normal" course-load and make normal progress with it. Some, however, may wish to reduce their course-loads—at least until they get their "academic legs" under them and gain a feeling of confidence that they can proceed satisfactorily with the usual course-load.

The extracurricular program has already been mentioned. What about social, cultural, athletic, and other non-class activities? Under the year-round calendar will it be "business as usual"? Can a student expect to move at the faster academic pace demanded by the full-schedule calendar and yet participate in extracurricular activities on the scale to which he has been accustomed? Answers, of course, will differ with individual students. Some will be able to take both the year-round curriculum and extracurricular activities in stride. Probably most students, however, will find it necessary to cut back somewhat on participation in the extracurricular program.

Financial problems for students may attend year-round campus operation. Full-schedule operation in itself will not increase the overall cost of a college education; in fact, it may reduce the total cost somewhat. But if the student wishes to accelerate, the year-round calendar will necessitate more concentrated spending over a shorter time span. In this case, however, the student will complete his college education sooner than is usual and enter into his life work at regular earning capacity at an earlier age. Some students will elect to borrow money and stay in college for longer stretches of time. Most institutions which have gone to year-round operation in recent years have found it advantageous to increase rather sharply their student loan funds. On the other hand, however, the student who must interrupt his college work to earn money for college expenses may find the year-round calendar to be an asset. Instead of competing with large numbers of other college students for summer employment he may find it to his advantage to attend the summer term and to work during some other term when temporary jobs are more readily available and when pay is possibly better. In any event, the student's finances for

his total college education are not adversely affected under the year-round plan.

Economic Problems for Institutions

Many economic problems for institutions of higher education are involved in full-schedule campus operation. But that is the subject of the next section of this publication. In Chapter 3 the financial implications of the year-round calendar will be considered in detail.

Chapter 3

Financial Implications of Year-round Operation

Relatively few institutions of higher education have adjusted their calendars and their policies in such a way as to hope for optimum use of their faculties and physical facilities. Within this group, a much small number have operated under their changed programs long enough for accurate statistical data relating to the financial aspects of year-round operation to be available. It is not feasible to give "before and after" comparative costs for these institutions either separately or as a group. Neither is it possible to make meaningful financial comparisons between this group and other institutions operating on the traditional calendars. As noted in the previous chapter, one reason for this difficulty is the fact that no completely satisfactory identification of "year-round institutions" has yet been made. This chapter on financial implications of year-round operation must necessarily depend largely on subjective judgments of individual faculty members and administrators, faculty committees, and consultants who have had experience with new programs or who have given considerable thought and study to the subject.

Within the framework noted above, an effort will be made to identify the factors which have important financial relation-

ships and to estimate insofar as possible the quantitative importance of these factors. First, a number of opinions from printed and unprinted articles and committee reports will be considered. Second, similar responses were solicited from each of the more than 50 institutions included in this study; a summary from these interviews and questionnaires will be presented. Third and finally, the writers will then summarize a number of their own views which have grown out of this study.

WHAT OTHERS HAVE SAID

A number of writers have presented evidence that substantial economies are possible in shifting to year-round operation. Some operating costs will change considerably while others will change very little or not at all. The increase in productivity in most situations will more than compensate for the increase in cost. The prospects for savings in capital outlay for buildings are even more promising.

Hungate and McGrath point out the importance of the financial implications of year-round operation:

> The authors believe that educational rather than fiscal matters should receive primary consideration in any revision of the academic calendar, but potential savings cannot be regarded as inconsequential. The fourteen-week trimester plan will result in substantial economies in operating costs and material increases in teachers' salaries."

The proceedings of the trimester conference held at the University of Pittsburgh in 1960 include the following statement:

> The financial aspects of the trimester plan were not of primary concern at the outset of the program. It was estimated that the added costs of trimester operation, *i.e.*, teaching salaries, salaries for extra clerks in the registrar's office, etc., would total about ten to fifteen thousand dollars more than would be received from tuition. This situation would seem, at first glance, to represent a loss; but actually, regardless of income, it resulted in more efficient use of plant and administrative personnel. The actual additional income from tuition and fees was $868,000 against added costs of

$475,000. This represented a net excess of income over expense of $393,000 which contributed to the reduction of overhead."[16]

Others have made similar estimates of the overall financial implications. For example, McKenna emphasizes the possibility of savings in plant maintenance cost.

> Because the physical plant of the college or university is an impersonal aspect of the program, it is readily adaptable to year-round operations. Whether or not the institution is on a year-round basis, it is estimated that 35 per cent of the plant costs are fixed."[17]

A Wisconsin study calls attention to the probability that additional tuition and fees would exceed additional operating expense.

> While the committee (at the University of Pittsburgh) recognized that financial implications of a trimester operation would be difficult to forecast, it stated that a trimester calendar will have effect in three areas—income from tuition, annual operating expenses, and capital expenditures, the latter mainly for faculty offices and laboratories. Financial statistics provided indicate that additional income from tuition and fees would exceed operating expenses, even if student enrollment in the third trimester were only one-third as large as one of the then current semesters."[18]

A number of institutions have given serious thought to year-round operation but have made a negative decision or have delayed the implementation of an affirmative decision because of the fact that year-round operation will undoubtedly cost more money. In most of these cases, attention has been called to the fact that while gross operating costs will be increased, the unit-cost (*e.g.*, per student-credit-hour) will almost certainly be decreased. Even when this has been clearly recognized, delay has been necessary until increased financial support could be secured, either from legislatures in the cases of public institutions or from contributing agencies and individuals in the case of private institutions. The following quotation will illustrate the point:

> No one should assume that a revised calendar will lower the operating budget of Ohio University. On the

contrary, the amount of money required to operate the University for a calendar year will increase. It will increase not because of the existence of a new calendar, but because of the increased educational services offered by the University. In the long run, the year-round program should provide an education at a saving in per-student cost, but in the short run such a program can be implemented only if substantially larger appropriations are provided."

Faculty Salaries

A benefit almost certain to accrue from year-round campus operation is better annual salaries for faculty members.

Hungate and McGrath have stated that "the fourteen-week trimester will result in . . . material increases in teachers' salaries."[*]

McGrath believes that "a properly designed three-term academic year can provide a 20 to 30 per cent increase in faculty income and still leave adequate time for scholarly activities and recreation."[*]

Easton estimated that "teaching salaries will increase 30 per cent" (in changing from a two-semester year with a modest summer school program to year-round operation)."

Cost of Current Operation

Hungate and McGrath used a hypothetical college with 1,200 students on a two-semester plan and estimated the increases in cost in moving to a proposed three-trimester program.[*] They assumed that a large majority of students would be in continuous attendance for the three-year period required to earn the baccalaureate degree. The total annual cost for operation increased from $1,440,000 to $1,799,640, an increase of nearly 25 per cent. According to their estimates, certain categories of expense increased as follows:

Alumni office, police, watchman, insurance, interest	No change
Publicity, public relations, and information	5%
Most aspects of general administration, publications, utilities, grounds, roads, walks	10%
Administration of student affairs, general institutional expense	15%

Admissions, registrar, placement, student organizations, maintenance and repair of buildings 20%

Staff benefits in student services and in plant operation and maintenance 25%

Student advisement; testing; salaries; supplies and expense; equipment in instruction and departmental research; library salaries, books, periodicals; administration, supervision, and operation of buildings; infirmary services . . 33%"

Hungate and McGrath indicate that, if in error, their estimates may have been too high. The following note of caution is added: "These estimates represent the subjective judgment of the writers and in some instances have probably been placed at higher figures than later experience would require."[22]

After presenting the above estimates Hungate and McGrath call attention to the fact that increased productivity more than compensated for the increased costs. They say:

> The unit expenditure falls therefore to $87.49 per student semester hour, a decrease of 6.3 per cent . . . . The reduction in unit cost may . . . be supplemented by important savings of capital outlay for additional plant, and such savings may be greatly augmented by more effective utilization of resources. There will also be net advantages in full-year operation of auxiliary activities such as dormitories, dining halls, and the bookstore."

Rauh attempted a similar analysis of possible savings for Antioch College.

> Certain fixed costs in the educational budget are independent of both the number of students and the length of the academic year. Typical examples of these fixed costs are insurance, debt charges, past-service retirement supplements, heating costs, telephone equipment rentals, a large part of maintenance cost (including upkeep of grounds), and so on.
>
> [Another] source of potential saving lies in the much more substantial costs of certain salaries and services. Although these are related to the longer operation and the size of the student body, they will

probably not increase proportionately. Here we could list such expense categories as those of the President's Office, major administrative officials, information services, admissions, development activities, student services, and accounting (other than that for student accounts). . .

Studies of these cost-enrollment relationships at Antioch College, which will begin a four-quarter, year-round educational program this July [1961], indicate that we should be able to increase the number of students enrolled by 25 per cent while holding extra costs to 10 per cent."

Capital Outlay for Buildings

Probably the most important economies can be made in reduced costs of additional physical facilities. In the immediate future the task of increasing financial support just for operating expenses alone will be a formidable one. If, at the same time, the tempo of providing additional buildings and equipment is to be stepped up drastically, the problem will be still more difficult. Even if the necessary financial support can be secured, the time element is important; it is improbable the facilities can be planned and constructed rapidly enough to meet urgent needs.

Concerning savings in capital outlay for physical plant, Nelson Associates make the following statement:

The central argument of the proposal for a balanced calendar rests upon the demonstration that a given institution can accommodate many more full-time students with the same plant. It is a necessary conclusion that capital costs per student place would decline markedly."

Hungate and McGrath also regard possible savings in capital outlay for buildings as important.

While the primary justifications for the fourteen-week trimester calendar are the more effective use of student time and more effective use of faculty resources and existing facilities, important savings in capital outlay requirements should also be realized."

Later in their report Hungate and McGrath go on to say:

> . . . some hundreds of thousands of additional students could be accommodated in today's institutions with little or no additional capital costs, although the summer term in hot climates may require additional air conditioning. . . With more effective utilization of existing facilities, the erection of new buildings and the purchase of additional equipment can be avoided. Hence, the higher education enterprise is freed of the cost of operating, maintaining, and eventually replacing such additional facilities."

Finally, Hungate and McGrath summarize their views regarding full-schedule economies as follows:

> In view of the existing serious financial problems in institutions of higher education, the economic advantages in full-year operation are highly significant."

Muskin and Bokelman estimate that "approximately $23 billion to $33 billion, varying according to the enrollment attained, will need to be expended for higher education physical facilities from 1961 to 1975."[m] After quoting this estimate, McGrath added:

> To the degree that institutions can make fuller use of existing facilities by keeping them in steady use, these figures can be correspondingly reduced. The three-term plan will save taxpayers and donors millions of dollars that would otherwise be needed for new facilities under the conventional academic year."

At the conference on the trimester calendar at the University of Pittsburgh in 1960 it was noted that:

> In the area of capital investment for plant, the advantage of the year-round calendar would seem to be even more marked. Again using the data from Pennsylvania, it is estimated that the three-term calendar would reduce the money needed for this purpose by about 40% [*sic*] and could postpone major expansion until 1964, the year when the greatest increase in enrollment will probably occur."

Rauh makes the following observation:

> It may come as something of a shock to learn that investment in physical plant may well be as much as or more than $15,000 a student . . . . If, then, a college can increase its capacity without increasing its plant, it has detoured a major financial roadblock. A college capable of handling a thousand students for nine months can shift to year-round operation [on the quarter system] and enroll one-third more students without adding to its physical establishment.[24]

Litchfield has emphasized the possibility of major savings in building capital outlay by adopting a year-round program. Says he:

> . . . a reasonably conservative calculation (for the next decade) indicates that if all institutions of higher education in the Commonwealth of Pennsylvania were to adopt a year-round academic calendar, the three quarters of a billion estimated for plant needs under the old calendar could be cut to less than a half billion. Similarly, if all institutions in the nation as a whole were to adopt the year-round calendar, the bill for additional physical plant over the next decade could be cut from $10 billion to about $6 billion.[25]

An unnamed writer for *Newsweek* magazine has made a similar comment based on the University of Pittsburgh experience: "The University [of Pittsburgh] has been able to increase the undergraduate enrollment by 35 per cent without expanding facilities. If all of the nation's colleges were to 'go trimester,' they would create space for another 1.2 million students."[26]

Ikenberry states that "total operating cost-per-student might be reduced (perhaps in the region of a 10-15 per cent maximum) due to proportionately lower overhead and administrative costs. Primary savings would be in capital construction costs."[27]

DATA AND OPINIONS FROM INSTITUTIONS STUDIED

So far in this chapter attention has been directed to what other writers have said about financial implications of year-round campus operation. Consideration now shifts to the ex-

periences and the views of the more than 50 institutions included in this investigation, a third of which were visited by either one or both of the authors to gather first-hand information.

This study confirms the initial opinions of the authors: concerning the financial aspects of the full-year calendar very little information of statistical accuracy is available. However, until more reliable data are available, estimates and opinions from those persons who have had experience with year-round operation, or who have given thought and study to the matter, should be of value to others who are considering change in the direction of full-calendar operation. It should be borne in mind that the data presented in this section are largely approximations or estimates.

As was to be expected, the institutions included in this study show a wide variety of calendars, policies, and practices. In the tabulations which follow, the total number of institutions is not constant because replies to the questionaries and to questions asked in the interviews were not complete in every instance.

Basic Period of Employment

Among institutions operating on the quarter system or the semester system fifteen use 9 months as the basic period of employment; one uses 9½ months; two use 10 months; and one uses 12 months. Among the trimester institutions, eleven consider two trimesters per calendar year as the normal basis of employment; six use two and one-half trimesters; and seven use three trimesters as the basis for the annual contract.

Salary Adjustments for Year-Round Service

In the quarter-calendar group all of the institutions offer a full summer quarter. Compensation for the summer quarter varies between half of the regular rate and the full rate for the other quarters. One institution on the quarter system pays a flat weekly rate to all summer faculty members regardless of rank.

Among the semester-plan institutions the salary rate for a 12-week summer session ranges between 20 and 33 per cent of the two-semester salary. One institution pays a flat summer rate for each rank. One operates a 6-week summer session (paying 15 per cent); one operates an 8-week session (paying

20 per cent); and two operate 10-week sessions (paying 24 and 26 per cent respectively).

In the trimester group, salaries paid for the third trimester range from 15 per cent to 50 per cent of the salary paid for the first two trimesters conbined. Modal pay for the third trimester is about one-third of the combined salary for the first two trimesters.

Leave Policies

Visits to institutions and replies to questionnaires reveal the fact that in many institutions provisions for regular leave in year-round colleges and universities are either non-existent or inadequate. In other institutions, however, the leave situation is better. The following quotations from questionnaire replies describe some of the more favorable provisions for leave which were found among quarter-system and semester-system institutions employing faculty on a 12-month basis:

Institution A: "We have no sabbatical leave. We grant leaves for military services, sickness, graduate study, and for serving for a period of time on the faculty of another college or university."

Institution B: "Faculty members are not allowed to teach more than five weeks each summer or ten weeks on alternate summers. In addition they may apply for leave any semester, with or without pay, for special purposes and projects."

Institution C: "One semester of leave at full pay is allowed every seventh year."

Institution D: One sabbatical year is provided after seven years on duty. Faculty members receive full pay on sabbatical leave unless they receive other income for their services."

Institution E: "One quarter off with full salary is allowed after teaching 12 consecutive quarters."

Institution F: "An individual is eligible to apply for a year's leave of absence with half pay upon completion of six calendar years, provided those years include at least eighteen terms of service; or two terms of leave with half pay may be earned for each twelve terms of service. Leave may accumulate to two terms with full pay or four terms with half pay."

Of the 21 institutions in the trimester-calendar group, 13 had workable leave programs in operation before adopting the

trimester calendar. A variety of leave modifications were reported. For example, one institution now provides one trimester off every four years rather than a semester off every seven years. Another grants a sabbatical leave of one trimester after 12 trimesters of service. Three other institutions have made plans for sabbatical or regular leaves. One of these plans provides for a leave of one trimester every three years for full professors, one trimester every five years for associate professors, and no earned leave for the lower academic ranks.

Attendance During the Summer Period

Among institutions operating on the quarter calendar, one institution, a well known teachers college, reported a much heavier enrollment in the summer term than in any other quarter. This, of course, is an unusual situation. Another institution reported that its enrollments are approximately equal in all quarters. Among other institutions, summer enrollments expressed as percentages of fall enrollments ranged from 28 per cent to 60 per cent with a mean of 44 per cent.

Data from institutions operating on the semester calendar are similar; summer enrollments expressed as percentages of the fall semester enrollment ranged from 30 to 70 per cent with a mean of 45 per cent.

Among institutions operating on the trimester calendar, attendance during the summer trimester ranged from 30 per cent to 80 per cent of the fall trimester enrollment, with the average seeming to be about 50 per cent. Most of the institutions in this group are still in a period of transition; enrollments in the summer trimester will probably increase substantially in the years ahead.

It will be noted that, regardless of the type of year-round calendar employed, summer enrollments in the institutions here studied seem to average about 44 per cent to 50 per cent of the corresponding fall enrollments.

Estimates of Increases in Income and Operating Costs Based on Experience of Last Fiscal Year

An attempt was made to determine the relationship between additional income and additional expense which could be related to year-round operation, and to relate both of these to increased productivity. For reasons already indicated, this has been a

very difficult task. Illustrative of the difficulty is the fact that among the institutions operating on the quarter pattern or the semester pattern, three institutions have been operating on the current calendar for one year, six for two years, one for six years, one for seven years, one for 10 years, one for 12 years, one for 17 years, one for 21 years, and seven for periods of 33 to 59 years. For most of these institutions it is difficult to isolate "additional income and additional expenses due to year-round operation." One institution in this group which is operating a longer summer session this year than heretofore, estimates that additional income on account of the change will not balance the increase in expenditures; all others that have made recent changes estimate that increased income and increased expenditures are in approximate balance.

Among quarter-system and semester-system institutions, only those whose "summer program has been substantially changed recently" were asked to respond to the questions concerning additional income and additional expense. Replies from this group were so few in number that a tabulation would not be of value. Among the trimester institutions, however, the estimated ratios of additional income to additional expense on account of year-round operation are shown in the following tabulation:

Institution	Additional Income*	Additional Expense*
A	30%	30%
B	25	20
C	5	3
D	15	11
E	6	2
F	15	6
G	15	5
H	15	5
I	6	6
J	50	20
K	20	20
L	17	15
M	25	15
N	8	10

Institution	Additional Income*	Additional Expense*
O	7	8
P	10	15

* Note that only three institutions (N, O, P) estimated more additional expense than additional income.

The 16 reporting trimester institutions estimated that annual expenses—other than faculty salaries—due to year-round operation have increased (or will increase) about as follows: non-academic salaries, 4 per cent; administrative costs, 5 per cent; maintenance of plant and grounds, 6 per cent; operation of the library, 7 per cent; student personnel services, 7 per cent; operation of the registrar's office, 13 per cent.

Two of the new trimester institutions estimated that the cost per credit hour will increase because of year-round operation—by 20 per cent and 8 per cent, respectively. Two others think it will increase but made no estimate of the amount. Two believe it will remain about the same as under the previous calendar. Eight estimate that the cost per credit hour will decrease in amounts varying up to 15 per cent; one estimates a decrease of 33 per cent.

A spokesman for one of the trimester institutions summed up the matter as follows:

> Increased income, which many colleges and universities consider to be a regular part of year-round operation, does not follow regularly. On the contrary, what follows regularly is only that which has preceded. If a college or university has a deficit operation in its two regular semesters of operation, it will merely add to its deficit in three semesters of operation. Only the school which regularly runs a balanced budget from operations or runs a budget with a surplus from operations on a two-semester basis will note any real income gain from a year-round operation.
>
> A substantial increase in expenditures for student activities, for airconditioning all the physical plant, for faculty salaries and staff personnel, and for scholarships and student aid will be necessary. Year-round

operation represents expansion and involves all the risks of such enterprise. No financial gain can inevitably be implied."

Among the trimester institutions, two indicated that they did not expect any savings in capital outlay for buildings in the next five years due to year-round operation. They already had a backlog of building needs. Fourteen others, however, estimated savings in the next five years ranging up to 33 per cent of the value of present facilities. The average expected saving in capital outlay for buildings over the next five years is estimated to be about 13 per cent of the current value of the present plant.

Estimates Based on Hypothetical Equalization of Enrollment

The attainment of the objectives of year-round operation is dependent in large measure on success in increasing summer enrollment. The institutions included in this study were asked to make certain estimates based on the assumption that approximate equalization of enrollment could be attained at the level of the present fall enrollment.

One important factor is the percentage of increase in the number of credit hours produced for the year which would result if this approximate equalization should be attained. Institutions operating on the semester plan and the quarter plan made estimates ranging from 7 per cent to 96 per cent with the median at 27 per cent. Among institutions on the trimester calendar, one—an institution already near capacity in all three trimesters and with little room left for expansion—made an estimate of only 5 per cent. Other estimates ranged from 21 per cent to 64 per cent with the median at 32 per cent.

The data just cited indicate that equalization of enrollment among all the terms of the year-round calendar will result in substantial increases in educational services and probably in substantial economies. The financial benefits of year-round operation will accrue to the degree that year-round equalization of enrollment is attained. A similar opinion is offered by Simon:

> If there are not a sufficient number of students already in the fall and spring trimesters the college should

consider whether or not it is economically sound to enter into the trimester program. Without an adequate number of students, such a system can cost rather than bring additional money into the college."

Prospects for Attaining Equalization of Enrollments

In the main, respondents in this study are hopeful that progress toward equalization of enrollments will be made; they are not very optimistic, however, as to the speed with which approximate equalization may be achieved. When asked to estimate the year in which this objective might be attained, half of the respondents in the quarter and semester groups combined would not attempt an estimate. Only two indicated an estimate as early as 1970, and two replied "Never."

Although five respondents in the trimester group did not attempt an estimate and although three others replied "Never," the members of this group were less pessimistic than respondents from the other groups. Seven gave dates earlier than 1970 and three estimated 1970 as the year by which equalization of enrollments will be achieved.

Financial Experience of Reporting Institutions

Institutions were asked in an open end question to comment on particular financial problems which have been encountered—or solved!—as a result of moving to year-round operation.

One institution reported that no appropriation is available for the summer trimester but that so far it has been made self-sustaining. Five state institutions reported that appropriations for the summer trimester have been inadequate to make it equal in program to the other two trimesters. One college reported summer enrollment inadequate to merit operation of all campus facilities. One reported difficulty in working out satisfactory methods of faculty employment and compensation for the summer period. One college reported great improvement in use of facilities "which are in very shor supply." Six institutions volunteered the opinion that important gains had been made in annual faculty salary. One stated that the "change permits us to move ahead of schedule in finding some facilities on student fee income." One college indicated that the change has "increased income 26 per cent and put the college on a sound

financial basis." Two reported that "year-round operation has moved us from red ink to black ink."

Summary of Comments on Financial Implications of Year-Round Operation

In another open-end question respondents were asked to summarize briefly the financial implications of year-round operation in their respective institutions. Had a check list been used, the number of respondents would undoubtedly have been larger. In any event, these comments have been condensed, grouped, and tabulated as follows; in each case the number of respondents making the comment has been indicated:

Comment	Frequency
Additional income will more than offset increased cost	10
Additional income and additional expense will remain in balance	6
There will be savings in capital outlay	6
Annual faculty salaries will improve substantially	6
Institutions will use facilities more effectively	5
Faculties will be used more effectively	2
Unit costs will decline	2
There will be little change in operating cost per unit	1
The change will result in a sound leave policy	1
Earnings from housing and food services can be used for other services without increasing the cost to the student	1
We have considered year-round operation in terms of service to students rather than from a financial viewpoint	1

Further Calendar Changes

Most of the institutions studied evidently believe that they have made whatever changes in calendar or program are essential for some time to come. Only one of the quarter-semester group foresees any important change in its calendar or program in the near future. In the trimester group no institution anticipates further calendar change.

SOME VIEWS OF THE AUTHORS REGARDING FINANCIAL IMPLICATIONS OF YEAR-ROUND CAMPUS OPERATION

Decisions regarding an institution's academic calendar should not be made primarily on the basis of financial considerations. However, the cost of higher education to the individual student, to the sponsoring agency or to the tax unit, and to the nation as a whole will be so great in the years immediately ahead that the financial advantages deserve very serious attention.

Although it is not possible at present to document the statement statistically, it seems reasonable to the authors to assume that if the operation is carefully managed year-round operation of a college or university will decrease the unit costs of operation, provided that the summer enrollment can be increased to approach the enrollment level of the other periods. Fifty per cent of the fall enrollment is tentatively suggested as the break-even point for a summer program comparable to that of the other periods.

The financial advantage of year-round operation is much more important in the area of capital outlay for buildings and equipment than in the area of operating cost. The financial burden of providing additional physical facilities will likely prove to be the most powerful single influence in stimulating year-round operation.

It should be noted that there is also a financial advantage to the individual student in year-round attendance. Temporarily the loss of income from summer employment and the greater expense of a 12-months period may seem to indicate a financial loss. However, the total expense involved in attaining a given academic objective such as the baccalaureate, master's, or doctor's degree will not be increased and the student will be ready at an earlier age for more lucrative employment.

Even if the student does not wish to accelerate his program, the pattern of year-round operation may work to his financial advantage. If he wishes to secure employment for a part of the year, he may find it to his advantage to attend college or university during the summer and seek employment at a period of the year when there is less of an imbalance of supply and demand for temporary employees.

If it is agreed that quantity and quality in American higher education have a direct relationship to the economic health

and prosperity of the nation, the increased number of students who can be accommodated in high quality institutions of higher education is in itself a financial factor of considerable importance.

It has already been suggested that year-round operation will have the best chance for success—both educationally and financially—when the terms are of equal length and are approximately equal in the character of course offerings. No other situation will provide so favorable an opportunity for admission of new students (including transfers) throughout the year and for uninterrupted progress, continuously or according to student's individual time pattern.

It has also been suggested that in the long run, success of year-round operation will be dependent upon equal faculty pay for equal periods of time. Faculty members should not be expected to work for indefinite or for reduced compensation rates during the summer period. The wide variey of current practices in adjusting salaries to year-round operation is to be expected in view of the transitional nature of this development. Many institutions have had in the recent past a policy of paying summer school salaries on a different basis from that used during the "regular" year. Some have even found it necessary to make commitments conditional upon the amount of tuition and fees received, thus requiring the summer session to be self-supporting. Some citizens have taken the unreasonable position that faculty members have been paid an adequate salary for the entire calendar year, and that they should be willing to do "a little more work" for "a slight adjustment in salary." This situation has been particularly true where faculty members employed for "the regular year" have received their annual salaries in 12 monthly payments. If the summer period is to become a coordinate part of year-round operation, it is only fair and just that compensation for the summer term be at the same monthly rate as that in effect for other periods of the year.

The transitional nature of this development toward year-round operation has not been the sole reason for the delay in establishing the principle of equal pay for equal amounts of work. Many institutions have made the change or have taken the initial steps in the new direction before appropriations or

other sources of income have been increased in an amount sufficient to cover the necessary additional expense. The legislatures—or the supporting constituents in the case of private institutions—have not realized that the increased annual cost may actually be an economy in terms of cost per credit unit. The current study shows this to be entirely possible and even probable. It is reasonably certain that this will be the case if capital outlay for buildings is considered along with current operating expenses. There is, therefore, every reason to justify the principle of equal pay for equal work which the writers believe to be so important to successful long-term year-round operation.

The authors believe there will be a trend toward 12-months employment for all faculty members, with reasonable policy of variation in assignment to duties. Although it is too early to show evidence that there is a definite trend in this direction, it seems probable that most institutions operating on a year-round basis will in the future pay their faculty members on a 12-months employment basis. No other arrangement will give the institution the same assurance of being able to plan a smooth operation, of having its faculty members available when needed, and at the same time of dealing justly with the faculty in the division of duties and compensation. Moreover, it is the writers' opinion that an equitable 12-months salary will enhance the research efforts both of the individual faculty member and of the institution.

If the increase in summer enrollment develops as expected, resulting in more faculty members working longer and more intensive work years, provisions for regular leaves will become essential. It will not only be necessary to vary somewhat the assignments to duty during the work year, but also provisions for regular leave will become imperative in order to combat excessive faculty fatigue.

Year-round operation with a summer program comparable to that of other terms, with reduced per-credit-hour operating costs, and with savings in capital outlay for buildings will not prove feasible for any institution until it has reached the point where it cannot accept all qualifed applicants for the fall period or until that point is in prospect for the near future. As a general

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rule, successful year-round operation will be dependent on an over-supply of applicants for the peak period.

A successful change to a new-type year-round calendar cannot be made overnight. An institution approaching the limit of its capacity in the fall term and expecting a continuing increase in the number of applications for admission should begin its consideration of possible year-round operation several years in advance and initiate the change (if decided upon) in time for it to be in smooth operation before the enrollment situation becomes critical.

The trend toward year-round operation will show a chain reaction acceleration as the number of institutions on similar calendar patterns increases. For example, institutions operating on a trimester pattern will be handicapped so long as they are "out-of-step" with the calendars of most of the junior colleges and other institutions from whom they expect transfers. All year-round institutions will be handicapped as long as the overwhelming majority of American homes think of September as the only appropriate time for the enrollment of entering freshmen. But junior colleges also may move to new-type year-round operation and, given time, the "psychology of attending college" is almost certain to be changed.

Further experimentation and considerable variation in year-round calendars are inevitable and desirable. Drastic expansions and modifications of programs and policies are to be expected and to be encouraged if the necessities for higher education in the near future are to be met. Finally, the fluid situation, the imminence of a flood-tide of enrollments, and the probability of numerous changes in the near future will necessitate frequent evaluations and sharing of experiences.

Chapter 4

Case Studies: Selected Year-round Programs in Operation

Earlier chapters have included the rationale for the year-round program; have considered the status, trends, and problems associated with the full-schedule calendar; and have given special consideration to the financial implications of year-round campus operation. In this chapter nine brief case studies are included in order that the reader may see how a variety of year-round calendars work in these selected institutions.

The authors are grateful to many persons—at least one person in each of the colleges selected for inclusion in this chapter—for assistance in preparing the case studies. In each instance the appropriate person is identified; to each of them thanks is here expressed.

ANTIOCH COLLEGE*

Antioch College began its current practice of year-round operation with the academic year 1958-59. During the first three years of its operation the summer quarter was eight weeks in length. Summer enrollments under this calendar in 1959 and 1960 were 187 and 184 as compared with fall enrollments of 754

* By Morris Keeton, Associate Dean of the Faculty, Antioch College.

and 795 for the years 1958 and 1959, respectively. Effective with the summer of 1961, the summer quarters become 11 weeks in length (all four quarters thus being approximately the same length). With this change, freshmen began to be admitted in July as well as in October; enrollments were 683 and 698 in the summer as compared with 699 and 772 in the fall, for 1961 and 1962, respectively.

The primary reasons for moving into year-round operation were educational. The academic terms prior to 1958-59 consisted of two 8-week periods in the fall followed by two 12-week periods in the winter and spring. Students at Antioch alternate between work and study under all calendars. The reason for adoption of the 1958-59 calendar were the following: (1) to make possible a reduction of student course-load to three or four courses at a time; (2) to eliminate beginning-of-the-year 8-week study periods; (3) to permit possibility of improved counseling services; (4) to permit a time break of a half week between the end of each study period and the dates students reported to the job; (5) to shorten the teaching year from 40 weeks to about 34 weeks. Other advantages were considered (*e.g.*, better use of plant) but were regarded as secondary.

With the change in 1961 to four quarters of equal length, financial and further educational objectives were emphasized: (1) to provide a complete separation of the two divisions of students (one entering in the summer and the other in the fall) until their senior year in order to give the effect of a smaller college community; (2) to provide strictly equivalent academic years for the two divisions of students; (3) to make better use of the plant and other facilities throughout the year; (4) to eliminate the "C-division" freshman year (a year in which the student was on campus for nine months straight) in favor of permitting a "C-division" year for seniors. It was also decided to take a 25 per cent increase in student enrollment (from about 1200 to about 1500 in residence) while increasing faculty by not more than 10 per cent. It was believed that year-round operation of dormitories and dining halls with more even distribution of custom through the year would make for more favorable financial outcomes. At the same time the College entered upon a ten-year program of improvement of compensa-

tion for faculty and other staff (doubling faculty compensation, for example).

The summer quarter is an ordinary quarter in terms of student population, curricular offering, and faculty, although there is some specialization by quarter. No special incentives are used for summer quarter enrollment; it is required for regular students as are other periods.

In 1957-58, tuition paid 57 per cent of the educational costs of Antioch; in 1962-63, 80 per cent. Average faculty compensation 1957-58 was $6200; in 1962-63 it was $8800 (excluding fringe benefits which also improved). Dining hall and dormitory operations are planned as break-even enterprises, but this objective has been met more easily and with move improvement of facilities and services than before:

Dining Halls . . .	1957-58 Deficit	$26,000
	1961-62 Surplus	$ 5,000
Dormitories	1957-58 Deficit	$ 8,000
	1961-62 Surplus	$60,000

The planned increase of students relative to faculty was carried through.

It is difficult to attribute specific financial gains or disadvantages to the year-round operation because of (1) continued increase in cost of living, (2) qualitative improvements in program and facilities, (3) the faculty benefits improvement program, (4) change in the duty year for faculty, and (5) problems in the definition of terms. The changed faculty-student ratio could have been managed in other ways. The separation of normal improvement of educational program from extraordinary steps, in an attempt to estimate financial advantages of a change of year, is difficult.

Freshmen entering in the summer are at least as able academically as those entering in the fall. There is some evidence from the summer of 1962 that summer grades may be slightly lower than those of other quarters.

The Antioch experience suggests that addition of the year-round calendar to the kit of management tools is an advantage, but that caution must be observed in attributing precise financial or educational gains to this one factor.

CHICAGO CITY JUNIOR COLLEGE*

The Chicago City Junior College prior to September, 1962 was on a two-semester academic year. One-half of the junior college's branches were open for an 8-week summer term.

In the fall of 1961 the newly established Chicago Teachers College North instituted experimentally a trimester calendar based on three 16-week trimesters per year. During the year of this experimentation the staffs of the Chicago City Junior College and the Chicago Teachers College South carefully evaluated the new calendar and reached a decision to place the Chicago City Junior College and the Chicago Teachers College South on the trimester calendar, thereby bringing all higher education under the Chicago Board of Education into the trimester calendar.

In the fall of 1962 the basic plan was instituted, with the junior college splitting one of the 16-week trimesters to provide a calendar with two 8-week terms beginning in January and late June (16-8-16-8). Because Chicago's high schools will, until 1967, have mid-year graduations, the junior college staff felt it was necessary to meet the needs of these mid-year graduates by using the 16-8-16-8 plan to allow for enrollment in the spring trimester beginning March 1.

By the time of this writing (April, 1963), the evaluation of the experience with the winter 8-week term has led to the adoption of a new variation of the 16-16-16 plan for 1963-64. The winter trimester beginning in early January will be scheduled to permit January high school graduates to enroll in early February for 12-week courses normally meeting four times a week instead of three for three semester hours of credit. They will earn up to 12 semester hours in the three months of February through April and be ready to enroll in the full spring trimester beginning in May. The spring trimester will permit the offering of 16-week and 8-week courses beginning in early May and another series of 8-week courses beginning in late June.

The principal reasons for introducing the trimester calendar have been acceleration of students' progress, increased utilization of high cost facilities, and increased productivity of the staff.

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* By Clifford G. Erickson, Executive Dean, Chicago Junior College.

The increased productivity of the classroom teacher achieved by compressing five-month semesters into four-month trimesters was recognized at the inception of the new calendar by an across-the-board increase of 15 per cent in basic monthly salaries for teaching personnel. Conversion of policies on conditions of service such as pension, sick leave, and sabbatical leave from the semester to the trimester plan is currently in process.

The Chicago City Junior College in the fall of 1962 served over 29,000 students in eight branches. Comparing equivalent full-time units of educational service for the 10 months beginning in the fall of 1962 (16-8-16) with the 10 months beginning in the fall of 1961 (20-20) has shown an increase of 27 per cent in units of service. If this 27 per cent increase is partitioned into factors, 12 per cent can be related to increasing demand for service related in part to opening new facilities in 1962; the remaining 15 per cent increase can be related to the trimester calendar which afforded an additional half trimester of service in the 10 months beginning in the fall of 1962.

The increase in salary rates and the increase in units of service have combined to keep unit cost of instruction in 1962-63 at the same level as in 1961-62. The increased service has been achieved with a very modest increase in administrative overhead. It is safe to say that economies in plant utilization have been and will be accomplished.

With adoption of the trimester calendar, Chicago City Junior College reaches one more step in the direction of a total and efficient service to the community. Beginning in 1948 the college day was extended from 4:00 p.m. to 10:00 p.m. Beginning in 1956 a program of expansion was undertaken to spread the network of branches from three to eight units. In the same year, 1956, broadcast television was introduced as a means of using home living rooms as classrooms. Recent years have brought an expanding use of facilities for summer instruction. The trimester calendar brings year-round operation in all branches with three full trimesters of service per year replacing an annual calendar with two semesters and a two-fifth semester summer term. The increase in service has afforded an increase in teaching salaries without a change in unit costs. Higher salaries will aid efforts to recruit outstanding teachers for the faculty of the Chicago City Junior College.

CHICAGO TEACHERS COLLEGE NORTH*

Chicago Teachers College North opened in September, 1961 on the trimester schedule and with an experimental curriculum. The students were comprised of freshmen, all taking the new curriculum; transfers from branches of Chicago Teachers College South, continuing with their old program; and graduates pursuing in-service training. The undergraduate curriculum for the new students followed the trimester plan; transfers followed the same class scheduling; graduates followed the traditional semester system, meeting classes in an "Extended Day" or "Late Afternoon and Evening" program running from approximately 4:30 p.m. to 9:00 p.m. In the summer of 1962, the first summer session was conducted from June 25 to August 17 for in-service training, the summer session being superimposed upon the undergraduate third semester, April 19 to August 27. Undergraduates are not encouraged to enroll in the summer session.

Changes made during the second year were: (1) a "pick-up" of mid-year high school graduates in a 12-week (instead of 16-week) term beginning January 28, with three-hour classes meeting four hours per week; (2) an additional, third, "Extended Day" program for in-service courses, beginning April 29, 1963, to run eight weeks on a double time basis. It is now expected that subsequent scheduling will follow this pattern, with two 8-week sessions superimposed on the 16-week summer semester.

The rationale for adopting the original year-round operation was based on the following considerations: (1) college facilities made available for students are increased 20 per cent (eight weeks each year) for many students; (2) the summer session becomes part of the overall plan; (3) each trimester is equal to the usual semester in the traditional semester program at other institutions; (4) longer work periods and times other than summer are available for students who wish to attend college only two trimesters a year; (5) a clinical internship for professional teacher education in addition to a liberal arts education can be achieved in a four-year period. (Chicago Teachers College students under the new program take eight

* By Jerome M. Sachs (Dean of the College), Matt L. McBride (Assistant Dean — Operations), and Hugh S. Morehead (Administrative Assistant to the Dean), all of Chicago Teachers College North.

trimesters of work in liberal arts plus a ninth trimester in professional teacher education. This is a content but not a chronological pattern.)

The limited but specific experience of this institution with the new year-round operation has been encouraging. There is general acceptance on the part of the faculty (a 15 per cent monthly adjustment in salary having been made to compensate for the former 18-week work being done in 16 weeks). For the students, there has been considerable confusion largely due to conflicting opinions and rumors surrounding their total situation; *e.g.*, when would student teaching actually come, and how would the student's status be affected by dropping out for a full trimester. Enrollment is definitely up, though perhaps not as sharply as originally anticipated. This situation will be radically altered no doubt as other schools adapt themselves to the accelerated schedule. Credit loads of students are the same. Faculty loads are approximately the same, as far as total classes handled; there is strong sentiment to introduce a reduction in view of the greater effort required to "keep up." Student achievement as reflected in grades would appear to be about the same as under the semester plan.

It should be remembered that this college has been in existence less than two years. Consequently, comparative figures, data, and statistics do not represent as valid a study as would be possible for a college which had been in operation over a period of three to nine years or longer. Studies and research conducted in 1966-1970 will produce really valid and substantiated results.

It is true that there has been an increase in income. However, this has not been a really striking jump or advancement. Whatever increase there has been in income has been almost immediately utilized to pay for additional and constant operational expenses of the college. All specific costs have mounted because of the increased length of the school year. We feel that this is balanced off in the more practical and efficient use of the college facilities. All costs have increased for services, salaries, supplies, equipment, and operation. Along with this is the faster depreciation of equipment and facilities which will be a factor in later years in replacement costs.

This being a teachers college, the only objective is the education of teachers through a liberal arts program plus sound professional work. Certainly tri-semester is a practical and efficient way to accomplish this objective. Through the years the financial aspects will solidify and be of great value to the taxpayer. The overall benefits to the student are of tremendous value financially, socially, psychologically, and professionally.

UNIVERSITY OF COLORADO*

In 1955 the administration of the University of Colorado, realizing the need for a higher degree of use of the physical plant in summer, determined to do all possible which was educationally sound toward accomplishing this end. Up to this time the summer offerings of the University had been primarily for teacher education.

An immediate objective was to build the curricula of most departments and divisions so that students could make substantial progress in summer toward any degrees offered. The possibility for acceleration was thus enhanced but students have not been urged to attend in summer for this purpose only. Considerable numbers now attend for different combinations of the three terms, fall, spring and summer semesters, entering and reentering as they see fit. About 3500 students attending in the spring semester continued during the summer of 1962. An additional 2000 former students who had attended in previous terms returned for the summer and some of these continued in the fall. The summer enrollment of 8000 in 1962 was about equally divided between graduate and undergraduate students.

Special emphasis has been placed upon bringing to the campus in summer outstanding visiting faculty to supplement the regular faculty. Emphasis has been placed upon the development of an excellent academic climate, through library development and use, and through special intellectual-cultural programs. Outstanding series of scholarly lectures have become traditional and are well attended, often by overflow crowds. The Creative Arts Program including 15 nights of Shakespeare plays in repertoire, the summer opera, the fine arts exhibits, modern dance recitals, musicals and concerts of all types make the summer semester outstanding in cultural as well as academic ways.

* By John R. Little, Dean of the Summer Session, University of Colorado.

The University has a standing committee working two and three years ahead on the calendar. The committee has consistently recommended for adoption the academic year of two 17-week semesters and one 10-week summer session (all exclusive of orientation, advisement, registration, and commencement periods) because it fits the University's year-round program needs. Recently, the committee has recommended that the 10-week summer session be called the summer semester. Responding to the pressures of the times and in order to determine in what additional ways the existing year-round program may be improved, a committee was appointed in 1962 to study year-round aspects. Reporting recently, the Year-Round Operation Committee recommended that "since the University already has a very substantial year-round program and because the present calendar pattern is satisfactory in most respects, the basic calendar should not be changed at this time."

Although no survey of opinion has been made recently, it is felt that a substantial majority of the faculty are well pleased with the present academic calendar and feel that with some adjustments it should be continued. Students appear to be happy with the plan. During recent years the summer enrollment has increased slightly faster than fall enrollment, although this trend may not continue unless further restrictions are placed on fall admissions. Student credit and faculty teaching loads in the summer session are about equal proportionately to those of the fall and spring semesters. As faculty salaries have been increased in the summer, larger and larger numbers of the University's own faculty want to teach in the summer term, although this is not required.

The University of Colorado has been able to maintain nearly 100 per cent occupancy of its residence hall facilities in all terms for about seven or eight years. The same may be said for classroom and teaching laboratory usage except for the late afternoon hours in summer and evening usage year-round. However, it should be noted that if spring and summer student enrollments and credit-hour production were to increase to fall levels this would only mean a 16.6 per cent increase over present usage.

Costs for year-round operation at the University of Colorado have increased directly in proportion to the additional numbers

of students enrolled. These increased costs have been noticeable, however, because as enrollments have increased and as faculty summer salary rates have approached the standard fall and spring rates, proportionately more University appropriated money has been used. In other words, the summer has become less and less able to support its instructional program from tuition income but must now draw heavily from the General Fund. Library usage has always been high in summer, but additional student personnel services, maintenance services, and the like will be necessary as summer enrollments increase still further.

Although the University adopted the policy of equal faculty pay in the summer term several years ago, it has been difficult to finance the resulting substantial cost increase because legislative appropriations for this purpose have not been forthcoming.

COLUMBIA COLLEGE (SOUTH CAROLINA)*

As in many other small institutions, the major issue facing Columbia College in 1957 was whether to retain the undeniable advantages offered by its size and the nature of its student-faculty relationship or to imitate the large university with all its diversity—but without its material resources. The Board of Trustees authorized at that time a study of the trimester system with the suggestion that here perhaps was a means whereby the College's identity as a small institution might be preserved.

Subsequent discussion and deliberations involving students, faculty, and interested friends explored many avenues and approaches to this complicated subject. Finally, in May of 1961, after four years of discussion it was announced that a trimester system—dubbed "The Columbia College Plan"—would be inaugurated in September, 1962. On a yearly basis this program would consist of three terms of 15 weeks each. Instruction for sixty-minute periods would be provided in lieu of the usual fifty-minute recitations, establishing thereby a maximum of 15 credits per trimester.

But the decision to move to a new system was not an easy one. There were no clear-cut indications that a small college with limited financial means should attempt such a project. However,

* By Thomas G. Schuler, Dean of the College, Columbia College (South Carolina).

it was decided to move forward with the plan on an alternate basis because of the following advantages:

1. Columbia College could enroll more students without having to increase facilities.

2. Students would be enabled to include in their educational plan a year of graduate study at far less expense than is presently necessitated by a four-year undergraduate program.

3. This three-year undergraduate program would have more appeal to the intellectually gifted student than does the four-year program and should appreciably increase the overall quality of the student body.

4. More economical use of the physical plant of the College would be possible.

5. Students would be able to enter the labor market sooner.

6. The three-year plan would help small, independent colleges to keep the happy balance between private and state-supported institutions.

In September, 1962, this educational venture began. For greater flexibility the third trimester will be divided into two parts (seven and one-half weeks each) in order to maintain the traditional four-year program (September-June) along with the new three-year degree plan, and in order to make it possible for public school teachers and students from other colleges to enroll during the summer session.

Obviously, with less than a year's experience, it is difficult to make observations about the new system, but generally speaking, the indications from students, faculty, and staff are favorable. Enrollment (approximately 700) has been at capacity for the last five years and the prospects for full utilization of the residential facilities throughout the year are good. Presently, the student credit loads are limited to 12 semester hours for four-year students and 15 semester hours for three-year students. Faculty teaching schedules of 12 semester hours involving approximately 100 students are maintained. The cost to the student of the three-year plan is less (by $600) than that of the four-year program. Despite the change to a new program, the grades of the first trimester reflected an improvement over the first semester grades of former years.

Increased income from year-round operation has come from tuition and fees. Thus far, no additional regular gifts, special gifts, or foundation grants to support the new calendar have been received. This year tuition and fees were raised slightly to secure additional funds to extend year-round contracts to one-half of the faculty.

Increased expenditures resulting from year-round operations have gone primarly into instructional costs, salaries, and expenses. General administrative costs, operation and maintenance costs, expenses in the registrar's office, and library operating expenses, have not increased appreciably because of the trimester system. Eleven-months contracts were given to the infirmary staff this year, accounting for a small increase in the operating costs of this facility.

At this time there seems to be little chance of any saving in physical facilities outlay from the trimester system. The only financial problem that has been recognized has been a shortage of operating funds during the first trimester. This problem occurred because the first trimester was shorter than the first semester last year; therefore, less income was collected. This situation will level out during the course of the year.

The liberal arts college has a mission to provide a broad well-balanced education. Columbia College is committed to this ideal and hopes through the trimester system to continue this tradition in the uncertain years ahead.

FLORIDA'S PUBLIC UNIVERSITIES*

The prospect of caring for rapidly increasing enrollments, which has given grave concern in most states of the nation, has been particularly disturbing in the State of Florida. In July, 1956 the Council for the Study of Higher Education in Florida recommended "that the State of Florida prepare to serve a greatly expanding enrollment of college students in the next ten to fifteen years and that the plans be based on an expected enrollment by 1970 of a least three times the number of students attending college in the state in 1955." Later enrollment records and forecasts indicate that this estimate was too conservative. The latest projection prepared by the Institute for Social Research at the Florida State University indicates that the un-

* By Milton W. Carothers and W. Hugh Stickler, both Professors of Higher Education, Florida State University.

degraduate enrollment for the State of Florida in 1970 will be nearly four times as large as that of 1957 and that the undergraduate enrollment in 1975 will be more than six times that of 1957.

The rapidly expanding system of public junior colleges is one phase of Florida's plan for coping with this problem. An increase in the number of state institutions offering upper division (and eventually graduate) work is another. Private institutions are expected to take an increasing number of students, but not an increasing percentage of the total. In addition to providing additional colleges and universities, the state faces the necessity of utilizing present and prospective facilities with greater efficiency.

During the year 1960-61, the Board of Control and its staff and the administrative officers of the state universities began a study of the possibilities for better utilization of faculty and plant. The tempo of this deliberation was speeded up when the legislature in May, 1961 made a part of the appropriation for 1962-63 conditional upon a certification that the public universities had inaugurated a plan for year-round operation which would equalize enrollment insofar as possible throughout the year.

A faculty committee in each Florida public university developed recommendations. Although there was consultation among these committees, a separate report was prepared by each. The Board of Control decided that there must be approximate uniformity of calendar among the four state universities. Two universities recommended the quarter system; two recommended the trimester calendar. On the recommendation of its Executive Director, the Board of Control decided on the trimester calendar.

The semester courses have been moved unchanged into a trimester of 15 weeks. The class period has been lengthened so that the number of minutes of class work per semester hour of credit remains unchanged.

During the first year of operation (1962-63) the third trimester has been divided into two equal parts. This permits another option to the individual student in addition to the two-trimester or the three-trimester year. It also provides in the second half of the trimester a convenient unit for summer work

by public school teachers. Some courses operate on a double time basis and are complete in a half trimester; others run through the entire trimester. This arrangement is regarded as transitional. It is probable that the half-trimester courses will disappear and that a summer session (primarily for public school teachers) will be superimposed on a regular trimester operating concurrently.

All faculty members are employed for two and a half trimesters per calendar year. On the assumption that two and a half trimesters require 10 calendar months of work compared with nine months for the former two semesters, an automatic salary increase of 11 per cent was given, with merit increases in addition. Some faculty members are needed for the additional half trimester, and are paid an additional 20 per cent for the additional time.

For the first half of the third trimester in 1963, the enrollments in the four universities ranged from 48 to 62 per cent of the respective fall enrollments. In each case the percentage of fall enrollment was higher than for previous summer sessions. The percentage is expected to increase substantially in subsequent summers. The 1963 legislature has made appropriations for the state's 29 public junior colleges on the assumption that some of them will go to all-year operation beginning with the academic year 1963-64. This change in junior college calendar is expected to facilitate greatly the equalization throughout the year of enrollments in the senior institutions.

Although it has many supporters, the year-round calendar has not met with universal acclaim in Florida's public universities. Many people feel the universities were pushed into year-round operation before they were really ready for it. Students and faculty members alike have felt "rushed"; the pace is fast. Some members of the faculty consider the system of pay for the two halves of the third trimester to be inequitable. Faculty members who ordinarily would like to teach or take work elsewhere during the summer find that the calendars "here" and "there" do not mesh. But the transition to the new calendar continues. Another year of experience ought to bring smoother operation and wider student and faculty acceptance. In rapidly growing Florida there seems to be only one logical conclusion

regarding some form of year-round operation: "It is probably inevitable."

PARSONS COLLEGE*

Parsons College moved into three-semester operation in June, 1960. Summer enrollment gains can be noted in the steady growth from 325 in 1960, to 950 in 1961, to 1400 in 1962, and to an expected 1800 this year. In ratio to regular fall and spring enrollments, the summer enrollment gain has been from 33 per cent in 1960 to better than 80 per cent in 1963.

The calendar at Parsons College is simpler than that of other colleges on the trimester pattern. A third semester was added in the summer months, which necessitated beginning the fall semester ten days later than usual; the free time between semesters was also reduced. The calendar year includes three equal semesters of 15 weeks each, plus one week given to final examinations and registration. Thus 48 weeks of the year are consumed in academic course work. The other four weeks are taken up in vacation breaks: two weeks at Christmas, one week at Easter, and one week around Labor Day.

A single modification of this calendar takes place during the summer trimester to facilitate acceptance of new freshmen who, because of the late date of high school graduation, are prevented from entering at the beginning of the term. These students take one course less than the normal requirement of five courses and begin three weeks later. This is the "trailer" session. Its vacation and examination periods coincide with those of the regular session, and the semester comes to a close for all students at the same time.

The college moved into the trimester program because this arrangement appeared to provide substantial gains (1) for students, who would have the opportunity of accelerating or of catching up; (2) for faculty, who could earn higher salaries; and (3) for the college, which with more complete utilization could support greater expenditures for an improved plant and program.

To stimulate attendance, a great deal has been done to enlighten both students and parents concerning the increased opportunities available for success through year-round college

* By Charles Sloca, Dean of the Faculty, Parsons College.

attendance. Further, liberal increases have been made in terms of scholarship helps and loan possibilities to offset the minimal type earnings which students and parents generally associate with summer activities. Finally, the college has been seriously concerned with providing adequate student activities to insure a typical college trimester in the summer months. During the summer trimester the college has an extensive fine arts festival bringing to the campus outstanding theatre personalities, noted music artists, and distinguished painters and exhibitions. The whole undertaking constitutes an activity which engages not only the student population but contributes substantially to the community and area as well. All of this serves to give the summer trimester an identity of its own comparable to that of the fall and spring semesters.

Achievement in terms of academic performance is consistently good in the summer trimester. Returning students have done as well as they have in any other trimester, and incoming freshmen have consistently done better in the summer trimester than comparable students beginning in the fall.

The program at Parsons College is a very workable one which is producing the anticipated dividends. There are tremendous benefits for the student, for the faculty, and for the college. These are the results of careful executive planning, efficient operation, and a considerable and regular amount of steady work.

PENNSYLVANIA STATE UNIVERSITY*

In the summer of 1961 the Pennsylvania State University, motivated by the following purposes, launched its four-term plan:

1. To make human and material resources of the University available on a year-round basis.

2. To provide more flexible programs and procedures to meet the increased damands for instruction and research services.

3. To enable students to accelerate their college careers and thus enter their vocations or further professional study earlier.

In planning for year-round operation a University senate committee was appointed which consisted of faculty members

* By Robert G. Bernreuter, Dean of Admissions and Registrar, Pennsylvania State University.

and administrators. This committee considered semester, quarter, and trimester schemes and came to the conclusion that no one of these calendars had educational advantage over the others. The committee then turned the matter over to the administration for the final decision and implementation. The administrative committee came up with the four-term calendar which is a hybrid derived from the calendar arrangement of the quarter plan and the schedule, course, and credit values of the semester plan. The final plan was accomplished by converting 50-minute periods in a 15-week semester to 75-minute periods in a 10-week term. The University has long operated in the summer session with 80-minute periods, and professors and students have had satisfactory experiences with longer class periods.

Students and faculty carry fewer courses and credits in a term and thus are able to concentrate their efforts in fewer areas of study. At the end of the three terms they have covered the same amount of work formerly covered in two semesters.

A substantial majority of the faculty has approved the move to year-round operation. Equal salary for all terms has no doubt had something to do with this general satisfaction. A recent opinion poll among students indicated about 50 per cent approve and 50 per cent do not. Many of the students attempt heavy course loads because of a desire to finish in 11 terms or because of the high total number of credit hours required in their majors. For many students the 75-minute class sessions are unsatisfactory.

With the advent of the four-term calendar a dramatic increase in students making the honor roll has been noticed. The "flunk-out" rate has decreased. While increased selectivity in admissions probably accounts for some of this enhancement in student performance, it is also felt that year-round operation has evoked a greater seriousness of purpose among students.

Enrollment in the summer term has increased to 38 per cent of the enrollment of the fall term. Previously, students attended only six weeks in the summer. Now, of course, they attend ten weeks. Approximate equalization of enrollments among the four terms will be realized when enrollment pressures increase.

The University has two plans for contracting with faculty members. One is for a period of 36 weeks; the other is for

48 weeks. Most of the faculty elect the second plan and the policy is to increase considerably the number employed for 48 weeks. Those employed for the longer period do not necessarily teach all four terms but are expected to do scholarly work or research in the term in which they do not have teaching responsibilities. Most of the faculty on 48 week contracts teach about seven out of eight terms.

After 18 terms of service (regardless of years) the faculty member earns one term of leave of absence with full pay or after 24 terms two terms of leave of absence with full pay or four terms with half pay.

With equalized enrollment among the terms, the University will be able to get approximately one-third more use out of its capital investment. With capital investment now worth $150,000,000 this is equivalent to a saving of $50,000,000.

All housing and food services in the University are financed with student fees. By using these services year-round, amortization of loans is greatly facilitated.

The greatest increase in cost has been in the area of academic salaries. There have also been increases in the cost of operating the registrar's office and in maintaining the buildings and grounds. However, a sizable portion of these costs have been offset by increased income from student tuition. The University is now operating on a balanced budget after two years of increasing expenses resulting from year-round operation.

This University's experience indicates that year-round operation is a good means of extending the human and material resources of the institution at minimal or nominal cost.

UNIVERSITY OF PITTSBURGH*

In September, 1959, the University of Pittsburgh inaugurated the trimester calendar consisting of three 15-week terms per year. The trimesters are identical and the student may earn as many credits per trimester as he formerly did per semester. There is no requirement for year-round attendance.

The primary reasons for the adoption of the trimester calendar were: (1) to enable the student to acquire both a liberal and a professional education in a reasonable period of time;

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(2) to give him an opportunity to acquire the expanding body of knowledge in his field; and (3) to enable him to begin his productive career early in his prime. Although it is not unmindful of the fiscal advantages attendant upon year-round utilization of plant and equipment, the administration was not moved primarily by those considerations in the adoption of the calendar; the educational reasons for the adoption of the trimester are of primary importance.

The student enrollment in the third trimester has been approximately 50 per cent of the students who are eligible. This includes those students attending schools and divisions of the University which are operating on the trimester calendar. The Schools of Medicine, Dentistry, and Law have not adopted the trimester plan. The Schools of Medicine and Dentistry, however, are operating on a year-round basis. Students in those schools use the additional time available for special research projects or for professional or personal enrichment.

Studies of students' attitudes as well as actual student behavior have shown that year-round attendance becomes more attractive to the student as he nears his educational goals. Therefore, the graduate students are attending the spring trimester more generally than are students at the undergraduate level, and upperclassmen tend to attend year-round in greater proportion than underclassmen.

A recent study of performance of students on the Graduate Record Examinations shows that students who attend year-round perform as well or slightly better than students who proceed through the educational continuum at the usual pace. Another study, not yet completed, seems to show that the quality point average of the accelerates (students earning their degree in fewer than four years) is slightly higher than the average QPA for the University as a whole.

A current study of faculty attitudes toward the trimester calendar, although not complete, seems to indicate no basic dissatisfaction with the year-round calendar. One specific indicator might be the increasingly high caliber of new faculty members brought to the University. This would seem to show that nationally, at least, faculty have no objection to the trimester calendar.

There are certain obvious points relating to financial considerations. Plant utilization is certainly higher on a year-round calendar than on any combination of summer school and workshop program. Administrative costs rise very slightly because most of the administrators are on a 12-month basis on any calendar. The primary increased cost for the third term is in faculty salaries. These salaries, of course, are offset by additional student tuition and fees. The one study of a fiscal nature which was done during the first year on trimester operation indicated that the third term tuition and fees of the students did represent a contribution to overhead.

A number of circumstances militate against a successful attempt to estimate the cost of the third trimester. The University is in the midst of upgrading all aspects of the organization. Included in these improvements are an increased faculty salary scale, rising levels of faculty competence, increased research competency and activity, and an expanding physical plant. The physical plant expansion is necessitated, in spite of year-round operation, because of the inadequacies of the present plant. If student enrollment could be made equivalent in all terms—and this would imply almost equal numbers of new admissions each term as well as equal student attendance—there is no doubt that the year-round calendar would be more economical than the two-term calendar. At Pittsburgh, however, it has been policy to make third-term student attendance voluntary and to make third-term faculty teaching voluntary.

As with all its programs, the University will examine the trimester operation periodically to improve it. Such a reexamination will be undertaken during the summer of 1963. At that time, suggestions from the faculty, the student body, and the administration will be considered. There is no intention of abandoning the year-round calendar. The opportunities for improving it, however, will be seized upon.

Chapter 5

The Current Situation: Summary and Conclusions

SUMMARY

A movement toward year-round campus operation is clearly under way. Interest in the full-year plan has never been greater than at present. There are educational, administrative, and socio-economic reasons for seeking more effective and more efficient year-round calendars.

Some confusion exists as to what constitutes a year-round operation. Minimal criteria include (a) at least 40 weeks of classes per calendar year together with (b) curricular offerings which make it possible for a student to complete the baccalaureate degree in three rather than four calendar years without having to take a heavier-than-normal full-time course load. More recent views, however contend that it is not enough to make three-year graduation possible; it is also necessary to stimulate and encourage summer academic activity and to move aggressively toward equalization of enrollments in all academic terms. The goal is to develop a better balanced, more unified year-round program which students—both undergraduate and graduate—will patronize on a year-round basis. A relatively large number

of colleges and universities meet the minimal criteria; the number of institutions moving toward the new type year-round operation is much smaller, but growing.

Major attention is being given to the summer term to bring it into line with the other terms of the traditional academic year—in fact, to make in interchangeable with the other terms. Many inducements are being used to increase summer enrollments. There is still student—and sometimes faculty—resistance to summer work in college; in fact, this resistance at present is the chief obstacle to successful full-schedule operation.

When year-round operation comes to an institution there will be problems: educational problems, administrative problems, faculty-centered problems, student-centered problems, economic problems. These problems are discussed at length in the earlier chapters of this report. The problems are real but they are not insurmountable.

Particular attention is given in Chapter 3 to the economic aspects of the year-round calendar. Summarized in this chapter are (a) the views of other writers, (b) the findings of this study, and (c) some views of the authors regarding the financial implications of full-year campus operation.

Included in Chapter 4 are brief case studies of year-round programs in nine selected institutions. In these colleges and universities theory has been and is being translated into action; these calendars are in actual operation. While probably every one of these institutions still has problems in connection with its full-schedule plan, substantial beginnings and progress have been made and are being made in each case toward effective year-round operation. At least they are trying!

CONCLUSIONS

Several major conclusions emerge from this study as follows:

1. The movement toward year-round campus operation, which has shown substantial growth during the past five years, will continue to grow. As college enrollments mount during the next five to ten years, interest in the full-schedule plan will be intensified and many additional institutions will move to year-round calendars. Within the next few decades year-round operation may become almost universal in American higher education.

2. Various patterns of year-round calendars will emerge but the strong tendency in the long view will be toward the new-type goals (a) of terms of equal length, equal character, and equal status; (b) of terms having approximately equal admissions and approximately equal enrollments; and, (c) of equal pay per term for members of the faculty and staff. Interchangeability of terms is highly desirable in a successful year-round campus operation.

3. Although no one system of year-round operation is likely to be established, the trimester calendar seems likely to emerge as the modal plan. In theory, it has been shown to be the most efficient plan and it provides the easiest transition from semester operation to full-schedule operation.

4. Intensified efforts have been and are being made to integrate and unify the academic year and to establish better balance among the terms. Particular attention is being given to the summer session in order to increase enrollments, to upgrade its character and status, and to bring it into line with the other academic terms.

5. The most important single obstacle currently militating against successful year-round operation is student and faculty resistance to attending college in the summer session. Until this "American folkway" of attending college in the winter but not in the summer is changed, year-round campus operation will be a struggle. But mounting enrollments and pressure for admission may change this "habit" sooner than most people think.

6. If successful long-term year-round operation is to be established, equitable use of faculty time—including teaching, research, service, and regular leave—will have to be achieved. The writers believe the principle of providing regular faculty leave is essential if such a program is to work effectively over a long period of time.

7. Intensive and extensive studies need to be made of the effects of year-round operation on the quality of the institution's total educational program. There would seem to be nothing inherent in the year-round calendar which would militate against academic excellence—in fact, year-round operation may well enhance the academic program—but much more evidence in the matter is needed before firm conclusions can be drawn.

8. There is considerable preliminary evidence to indicate that successful long-term year-round operation will result in substantial economies to the institution. It can be said with reasonable assurance that the unit cost per full-time-equivalent student will not be increased as a result of year-round operation and that it probably will be decreased.

9. The major institutional economies will result (a) from more efficient utilization of the physical plant and facilities and (b) from long-term savings in capital outlay for buildings and equipment. There will probably be savings in operations once the program gets fully under way.

10. Preliminary evidence also indicates that long-range financial advantages will probably accrue to students who attend colleges and universities employing year-round calendars. At least the potential benefits are there.

11. To the writers, acceptance and establishment of the principle of equal pay for equal periods of work is considered to be extremely important. It seems unlikely that year-round operation will prosper in the long haul if this principle is not adopted. At present it is not the modal system of pay in year-round campus operations but there is some preliminary evidence that this pattern of pay will emerge.

12. The writers believe that the 12-month contract (including the principle of equal pay for equal work) will emerge as the "standard" pattern of faculty remuneration. It is not an absolute requirement but it is felt to be desirable (especially in facilitating the principle of interchangeability of terms), provided the base salary can be made and kept equitable.

13. Before an institution moves into full-scale year-round operation there should be enrollment pressure and pressure for admission adequate or more than adequate to fill the institution to capacity during the period of maximum enrollment. For some time to come—at least for the next few years—successful year-round operation will be dependent in considerable measure upon an over supply of applicants for the peak (fall) term.

14. Further experimentation with year-round calendars is both inevitable and desirable. All the answers are not yet in. Continuing evaluation of year-round operation is essential. Exchange of information and experiences among educators and institutions is desirable and to be encouraged.

Appendix

Institutions Included in Present Study

Abilene Christian College
Allegheny College*
Antioch College**
Baylor University
California State College (Pennsylvania)
Carleton College*
Chicago City Junior College**
Chicago Teachers College North**
Columbia College (South Carolina)**
Delta College
Emory University**
Florida Agricultural and Mechanical University**
Florida Atlantic University* **
Florida College (formerly Florida Christian College)
Florida State University**
Fort Lewis Agricultural and Mechanical College*
George Peabody College for Teachers**
Georgia Institute of Technology**
Golden Gate College*
Harpur College of the State University of New York*
Iowa State University of Science and Technology

Jacksonville University**
Kalamazoo College**
Kent State University
Kentucky Southern College*
Nebraska State Teachers College (Wayne)**
Oakland University (Affiliated with Michigan State University)
Park College*
Parks College of Aeronautical Technology of St. Louis University
Parsons College**
Pennsylvania State University**
Point Park Junior College*
Shippensburg State College
State University of Iowa
State University of New York at Buffalo
Tarkio College
Taylor University*
University of Alabama**
University of California*
University of Cincinnati
University of Colorado
University of Denver
University of Florida**
University of Michigan* **
University of North Carolina**
University of Oregon
University of Pennsylvania
University of Pittsburgh**
University of South Florida**
University of Southern California, School of Business Administration
University of Southern California, School of Education
Vanderbilt University
Wayne State University
Wheaton College (Illinois)

*This institution was able to furnish only limited information useful to this study.
**This institution was visited by one or both of the authors of this report.

Notes

[1]Included in this number are all the 40 colleges and universities listed in *The Year-Round Campus Catches On* by Sidney G. Tickton, a 1963 publication of The Fund for the Advancement of Education, 477 Madison Avenue, New York 22, New York.

[2]Grayson Kirk as quoted by the *New York Herald Tribune*, June 2, 1963.

[3]Edward Harold Litchfield, Chancellor of the University of Pittsburgh, has developed a rather extensive rationale for year-round campus operation. This section draws in part from his writings.

[4]Edward Harold Litchfield, "Trimester: Education of Superior Quality in a Shorter Length of Time," *College and University Business*, Vol. 31, No. 1 (July, 1961), p. 25.

[5]*Ibid.*, p. 25.

[6]Charles M. Grigg and William A. Stacey, *Projection to 1975 of Total Undergraduate Enrollment for the State of Florida* (Tallahassee: Institute for Social Research, Florida State University, 1963).

[7]Litchfield, *op. cit.*, p. 26.

[8]Tickton, *op. cit.*, p. 6.

[9]These views are elaborated in *Increasing College Capacity by Calendar Revision*, A Report to the State University of New York by Nelson Associates, 1961, pp. 18-22.

[10]Elmer C. Easton, *Year-Round Operation of Colleges*, Engineering Research Bulletin No. 41 (New Brunswick: Rutgers, the State University of New Jersey, 1958).

[11]Nelson Associates, *op. cit.*, p. 29.

[12]Thad L. Hungate and Earl J. McGrath, *A New Trimester Three-Year Degree Program*, (New York: Teachers College, Columbia University, Bureau of Publications, 1963).

[13]Grayson Kirk as quoted in the *New York Herald Tribune*, June 2, 1963.

[14]Hungate and McGrath, *op. cit.*, Foreword, p. vi.

[15]*Proceedings of the Trimester Conference*, University of Pittsburgh, June 15, 1960, p. 9. Unpublished document.

[16]David L. McKenna, "The Academic Calendar in Transition," *The Educational Record*, Vol. 43, No. 1 (January, 1962) p. 72.

[17]*Wisconsin Study of Longer School Year*, 1960, p. 21. Mimeographed report by Joint Staff of the Coordinating Committee for Higher Education.

[18]Unpublished report of the Calendar Committee, Ohio University, January, 1963.

[19]Hungate and McGrath, *op. cit.*, p. vi.

[20]Earl J. McGrath, "Plea for the Year-Round College," *New York Times Magazine*, (April 28, 1963), p. 64.

[21]Easton, *op. cit.*, p. 11.

[22]Hungate and McGrath, *op. cit.*, pp. 21-27.

[23]Data selected and rearranged from Hungate and McGrath's Table IV, pp. 22-25.

[24]Hungate and McGrath, *op. cit.*, p. 26.

[25]*Ibid.*, pp. 26-27.

[26]Morton A. Rauh in *Antioch Notes*, Vol. 38, No. 7, April, 1961.

[27]Nelson Associates, *op. cit.*, p. 41.

[28]Hungate and McGrath, *op. cit.*, p. 28.

[29]*Ibid.*, p. 29.

[30]*Ibid.*, p. 30.

[27]Selma J. Mushkin (ed.), *Economics of Higher Education*, (Washington: U.S. Department of Health, Education, and Welfare, 1962), p. 193.

[28]McGrath, *op. cit.*, p. 62.

[29]*Proceedings of the Trimester Conference*, *op. cit.*, p. 4.

[30]Rauh, *op. cit.*, pp. 3-4.

[31]Litchfield, *op. cit.*, p. 25.

[32]"Speed Up on the Campus," *Newsweek*, 58:70-1, August, 1961.

[33]Stanley O. Ikenberry, "Year-Round Operation." Mimeographed document prepared for the faculty of West Virginia University, April, 1963.

[34]From correspondence from Charles Sloca, Dean of the Faculty, Parsons College.

[35]Richard M. Simon, "The Trimester Plan: Implementation and Management," *North Central News Bulletin*, Vol. XXII, No. 2 (November, 1962), p. 3.

Selected References

American Association of Collegiate Registrars and Admissions Officers (Committee on the University Calendar), *The University Calendar*. Published by AACRAO, 1961.

Considers historical backgrounds, types, and comparisons of academic calendars. Emphasizes need of planning before calendar change. Includes case studies of Dartmouth College and the University of Pittsburgh. "The pressure for increasing college enrollment and the greater number of students going on to graduate study are the new factors leading to a review of the present calendar patterns. A year-round academic calendar holds out the possibility of an increase in student capacity."

Easton, Elmer C., *Year-Around Operation of Colleges*. (Engineering Research Bulletin No. 41) Rutgers, the State University of New Jersey, New Brunswick, 1958.

"The purpose of this bulletin is to consider some of the major factors involved in changing the academic schedule of a university from the standard two-semester calendar year to a program under which instruction is carried on throughout almost all of the calendar year." Analyzes advantages and disadvantages of various operating schedules. Using idealized mathematical models of operation, it was found that the greatest

increase in student capacity, the highest efficiency of operation, and the lowest cost resulted from a trimester operation with three entering classes per year, each of the same size.

Freed, Marjorie, "The Antioch Plan," *Saturday Review*, Vol. XLV, pp. 53-54, December 15, 1962.

"A variety of concerns motivated Antioch to change to a twelve-month calendar: a desire to take its fair share of rocketing enrollment; the need to control costs through efficient, year-round use of college resources; fear lest mounting enrollment destroy its traditionally student-centered program."

Hechinger, Fred M., "A Cure for Growing Pains," *Saturday Review*, Vol. XLII, pp. 20-21 ff., September 12, 1959.

Reviews the emerging need for year-round operation, then considers the trimester system at the University of Pittsburgh. "It appears certain that changes [in the academic calendar] are about to be made, and Pittsburgh has started the ball rolling. Conservatives will frown, and some will sneer. Enthusiasts will see utopia in the making. But nobody interested in higher education will ignore the experiment—one of the first designed to deal dramatically with the coming college crisis."

Henderson, Algo D., "A Critical Look at Year-Round Operations of Institutions," *Current Issues in Higher Education, 1962*, pp. 161-164, Association for Higher Education (NEA), Washington, 1962.

"Is year-round operation feasible? The answer has to be definitely 'Yes.' It has been tried and has been found to be successful in operation. The problem that looms the largest is often that of changing peoples' attitudes. Students have been found to be reasonably flexible, and they do respond."

Hicks, Weimer, "The Kalamazoo Plan," *Saturday Review*, Vol. XLV, pp. 52-53, December 15, 1962.

"The new Kalamazoo Plan divides the year into four eleven-week quarters of three subjects each instead of the usual five or six. Most courses require more independent study in library or laboratory, less dependence on classroom recitation. The plan differs from other quarter plans in that not all quarters

are spent on campus. Credit is given for time spent in study abroad and for career and service activities off-campus."

Hungate, Thad L. and Earl J. McGrath, *A New Trimester Three-Year Degree Program.* Published for the Institute of Higher Education by the Bureau of Publications, Teachers College, Columbia University, New York, 1963.

"The authors of this report firmly hold the conviction that radical alterations are needed to adapt the academic calendar to the changing conditions of American life." They recommend an academic year of three fourteen-week trimesters with the bachelor's degree ordinarily being conferred at the end of nine trimesters or three calendar years. "The authors believe that educational rather than fiscal matters should receive primary consideration in any revision of the academic calendar, but potential savings cannot be disregarded as inconsequential. The fourteen-week trimester plan will result in substantial economies in operating costs and material increases in teachers' salaries."

Kirk, Grayson (as told to Stanley Frank), "College Shouldn't Take Four Years," *Saturday Evening Post,* Vol. 232, p. 11 ff, March 26, 1960.

A leading American educator proposes a nationwide, three-year trimester system which he says will benefit the student, the college, and the nation. "The most insistent problem in higher education today is the necessity to reduce the time spent in preparation for careers. The trend toward specialization and the mounting emphasis on postgraduate work require men and women entering professions to devote nearly half their productive lives to academic instruction before they can begin to support themselves and contribute their knowledge to the public welfare. This is not only an intolerable social and economic waste; it is also deterring many of our ablest students from applying their talents to essential fields."

Litchfield, Edward H., "The Trimester System," *Saturday Review,* Vol. XLV, pp. 50-52, December 15, 1962.

Brief description of the trimester system at the University of Pittsburgh. "Educators and legislators have greeted it as a means of getting more efficient use of existing educational plants, which cost the same to maintain whether they are

erated eight, nine, or eleven months of the year. The plan, if adopted nationwide, would reduce the $10 billion needed in the next decade for new facilities to about $6 billion."

Litchfield, Edward Harold, "Trimester: Education of Superior Quality in a Shorter Length of Time," *College and University Business*, Vol. 31, pp. 24-27, July, 1961.

". . . if we are going to meet the needs of the coming generation of students, we must make our resources go further by more intensive use. Failure to do so means either a poorer quality of education for a larger number of students or a refusal on our part to educate many young people who are qualified for an education. In our view neither alternative is likely to help our nation in the competition for survival."

McCabe, Joseph E., "The 3-3 Plan," *Saturday Review*, Vol. XLV, pp. 54-55, December 15, 1962.

"Year-round operation of our colleges and universities is a growing trend. We are going to see more demand from those who support higher education for colleges not to stand idle twelve to sixteen weeks a year as most campuses do now. Futher, the possibility of completing the college course in three years will be demanded by more and more students."

McGrath, Earl J., "Plea for the Year-Round College," *The New York Times Magazine*, April 28, 1963, p. 52 ff.

"The situation today presents compelling reasons for operating colleges and universities around the calendar. They can be classified under five headings: (1) the need to speed up formal preparation for adult life and work; (2) the shortage of college and university teachers; (3) the need to accommodate additional students; (4) the high cost, and the present uneconomical use, of buildings and other facilities; (5) the need for higher salaries for teachers." Strongly recommends academic calendar year consisting of three fourteen-week trimesters and lists advantages of such a system. The baccalaureate degree usually would be conferred at the end of nine trimesters and within a three-calendar-year span of time.

McKenna, David L., "A Larger Look at the University Calendar," *The Educational Record*, Vol. 42, pp. 266-230, July, 1961.

"The trends in university education make it imperative that an academic calendar for the year-round operation of the institution be adopted. This is required by the expanding enrollments and the limited facilities, the range of problems anticipated at both the graduate and undergraduate levels, the increased length of time in prospect for professional education, the demand for countinuing educational services, and the growing emphasis upon sponsored research."

McKenna, David L., "The Academic Calendar in Transition," *The Educational Record,* Vol. 43, pp. 68-75, January, 1962.

"Year-round operation seems to be accepted as an inevitable part of the future for most colleges and universities in American higher education. This need for the full use of the calendar year is an outgrowth of the increasing demands for the services of the institution of higher education, particularly in terms of the anticipated expansion of student enrollments. At the present time, however, this demand is not acute enough to require immediate action. Consequently, the academic calendar may be described as being in a state of transition between the traditional pattern of the nine-month calendar year and the proposed full utilization of the calendar year."

Nelson Associates, *Increasing College Capacity by Calendar Revision.* (A Report to the State University of New York.) Privately printed, 1961.

A report by Nelson Associates, management consultants, to the State University of New York. Report states, "A balanced year-round calendar provides the best means of increasing college capacity through calendar revision. . . The balanced trimester calendar is slightly superior in efficiency to the balanced four-quarter calendar; but either is far superior in efficiency to the conventional calendar, whether semester or quarter." Concludes that for maximum advantages the terms must be equal in length, character, and status with equal admissions every term. ". . . the efficiency of the calendar increases to the degree that these ideal conditions can be met."

Rankin, Alan C., "The Trimester Plan of the University of Pittsburgh," *Current Issues in Higher Education, 1961,* pp. 167-

170, Association for Higher Education (NEA), Washington, 1961.

"Higher education must utilize what it has before it turns to its friends, legislative or otherwise, for additional support. In my state [Pennsylvania], it is estimated that the trimester calendar will reduce the money needed for physical plant by forty per cent and we will still need several hundred million dollars."

Rauh, Morton A., "College the Year Round," *Antioch Notes*, Vol. 38, April, 1961.

"Studies of these cost-enrollment relationships at Antioch College . . . indicate that we should be able to increase the number of students enrolled by 25 per cent while holding extra costs to 10 per cent."

Simon, Richard M., "The Trimester Plan: Implementation and Management," *North Central News Bulletin*, Vol. XXII, pp. 2-6, November, 1962.

Describes at some length the "implementation and management" of the trimester plan at Parsons College. "If there are not a sufficient number of students already in the fall and winter trimesters, the college should consider whether or not it is economically sound to enter into the trimester program. Without an adequate number of students, such a system can cost rather than bring additional money into the college."

Stickler, W. Hugh, "The Year-Round Academic Calendar," *Proceedings of the Thirty-First Conference of Academic Deans of the Southern States*, pp. 5-20, November, 1962. (Mimeographed.)

Surveys problems and patterns of year-round operation. Reports several inducements intended to increase summer enrollments. Lists six optimum conditions for operating year-round calendar. ". . . we shall have more . . . year-round calendars. And the reason is very simple: We have no alternative."

Tickton, Sidney G., *The Year-Round Campus Catches On*. Published by the Fund for the Advancement of Education, New York, 1963.

"Today no one doubts the soundness of the projection that a tidal wave of students is about to hit our colleges and

universities. . . What to do about this has been plaguing higher education officials—and trustees and legislators, too. There has been a casting around for ways of tackling the problem. One approach (long suggested by both friends and critics of colleges and universities) is to use classrooms, laboratories and libraries more efficiently. . ." Booklet summarizes data on forty institutions currently committed to and/or operating on year-round calendars.

Walker, Eric A., "The Need for Public Co-operation," *Journal of Higher Education*, Vol. XXXII, pp. 399-401, October, 1961.

"A large number of universities across the country have operated for many years on schedules that permitted—even encouraged—summer attendance. Yet at none of them does the summer enrollment approach the enrollment of the 'regular' school year. Why not? . . . The answer is simply that students do not—and evidently will not—attend summer sessions as a general rule. The custom of going to school during the winter months and not during the summer months is an American folkway. . . Improvement must come through a change in the attitude of the public."